Journal Of Indian Health Psychology

Vol.11 2016 No.1-2

132471

07

International Peer Reviewed and Refereed Journal

Vol. 11, No. 1, September, 2016

ISSN: 0973-5755

Journal of Indian
Health Psychology

GLOBAL VISION PUBLISHING HOUSE, NEW DELHI

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Journal of Indian
Health Psychology

VOL. 11, NO. 1, September, 2016

Editors

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Prof. NovRattan Sharma

Printed & Published by Dr. N.K. Singh, F-4, 'Hari Sadan', 20, Ansari
)aryaganj, New Delhi-110002
at: R.K. Offset, Naveen Shahdara, Delhi-110032.

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EDITORIAL

The Journal of Indian Health Psychology (JIHP) is scholarly journal devoted to interdisciplinary researches that generate knowledge and understanding of the scientific relations among psychological factors, behavior and health with special focus on Indian data. Present issue includes nine research articles.

The first article in the present issue is contributed by Sushma Pandey and Nidhi Gupta, exploring the mediating role of future orientation and time management in managing time stress- health relationship in medical professionals. The authors evinced direct positive link between time stress and health (illness) which is mediated by future orientation and time management strategies. Mandeep Sharma and Hardeep Lal Joshi examined the role of Family Environment and Self-Efficacy in Adjustment among female adolescents. The next article enlisted in the current issue discusses emotional states of the trauma patients' based on pre and post intervention program. Rachana Kumari and Anjana Mukhopadhyay found that practice of cognitive restructuring and various relaxation training can help people with traumatic experiences.

Pallavi Raj and NovRattan Sharma emphasized the importance of Acceptance and Commitment Therapy in the treatment of Generalized Anxiety Disorder and also highlighted its role in improvement in all the dimensions of Quality of life of generalized anxiety disorder patients. Shreya Chaudhary and S.K. Srivastava compared the level of aggression and family environment between day worker and night worker. The authors found night workers to be more aggressive even their family environment was poorer than day workers. Touseef Rizvi and S. Reshma Jamal developed an inventory for assessing nature of Traumatic Stress and also assessed the Traumatic Stress among Kashmiri people living in low and high risk conditions.

In the next article, Kadambari and Deepti Hooda studied the role of Self-efficacy and Locus of Control in Adherence to medical regime among arthritis patients. Investigators found Self Efficacy and Locus of control to be significantly predictors of Adherence to Medical Regime in patients with arthritis. For better adherence to Medical regime, Health practitioners should focus on Health/Disease related Self Efficacy and Health related Locus of Control of patients while prescribing the medical regime. Findings of the present study highlights the need of developing intervention programs with a aim to enhance health related Self Efficacy and Locus of Control in order to encourage and motivate patients to adhere to medical regime.

Shubhakar Gajula and Beena Chintalapuri conducted an exploratory study aimed to identify the behavioural traits for the competency of problem solving of Health Professionals. The authors also studied the relationship between the identified traits and job performance. Mandeep, Sharma Amrita Yadava and NovRattan Sharma empirically explored the relationship between various dimensions of Life style and areas of Psychological well-being among college students. The authors suggested that possessing Healthy life styles enhances one's well being.

Editors are grateful to all the investigators/authors of the research articles and referees for their valuable inputs. We seek the feedback from their readers in order to further enrich the journal.

Editors

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FUTURE ORIENTATION AND TIME MANAGEMENT AS MEDIATORS IN TIME STRESS-HEALTH RELATIONSHIP

Sushma Pandey and Nidhi Gupta ***

ABSTRACT

This study analyzes the mediating role of future orientation and time management in managing time stress- health relationship in medical professionals. A correlation design was used where a sample of 240 medical professionals was selected by using stratified random sampling (type of hospital: Government & Private Hospitals; job category: Doctors & Para medical staff and level of future orientation: high & Low). Story Writing Test was used to determine the level of future orientation (FO) and Time Stress Questionnaire was used to measure time related stress. Further, Time Management Scale was used to assess time management strategies. Finally, CMI Health Index Questionnaire was used to determine physical and psychological health of respondents. Bivariate and multivariate statistical techniques were used for data analyses. Results revealed close links between time stress, future orientation, time management and health. More specifically, time stress was found to be positively related with physical and psychological illness. Interestingly, FO was found positively related with time management, but inversely related with time stress as well as physical and psychological illness. Similarly, time management was found inversely related with time stress and illness. Regression results proved differential roles of FO and time management in time stress and illness. Specifically, FO as dispositional characteristics of person, exerted positive role in enhancing time management strategies and mitigating stress outcomes in medical professionals.

Key words: Future Orientation, Health relationship, Time Management and Time Stress.

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Time is universal feature of human life. For some people time is a friend and it brings challenges, pleasure and satisfaction, whereas, for others, time is an enemy, as it brings anxiety, stress, boredom or confusion. For those whom time is an enemy, they perceive it too much or too little, feel more time stress, which in turn has a damaging impact on their health. If time is perceived as a pressure, people feel rushed, hurried and irritated, and that attitude towards time remains constant for a long duration, causes time related stress (Levine et al, 1989; Pandey & Pandey, 2014). In this regard time perspective or future orientation plays vital role in time related stress and its consequences on health status of people.

Time-stress is defined as "an externally induced urgency (exerted upon the user) to complete an assigned task within a specified or limited amount of time." (Shneiderman, 1993). Any situation that places people under pressure is technically stressful and the term stress usually denotes those pressures which are harmful, unpleasant or disabling. Thus, time-stress occurs when the pressure of time upon us exceeds our resources to cope with those pressures. If that attitude towards time remains constant for a long duration persons tend to feel time-related stress. The excessive stress has ill effect on health and wellbeing; it causes emotional problems, mental illness, physical illness and social deviance (Rice, 1987) along with lowering of total quality of life. In short, the more one feel rushed, hurried, and hassled, the greater is one's chance of feeling distressed, unwell and troubled in their relationship (Robinson & Goodbay, 1997).

Time stress occurs more in professionals performing emergent duties. Medical profession is a challenging job in which emergent duties are required. Obviously, such type of jobs make people prone to time stress and morbidity. The nature of the specialty and the duration of professional experience influences risk of morbidity in doctors (Kapur, Borrill & Stride, 1998). For instance, in junior doctors low autonomy predicted psychological morbidity while work demands were most predictive in older doctors. In relation to medical specialties for instance, work related stress and specifically, "low task–role clarity" predicted later depression in emergency medicine residents , while in GPs, routine work administration, job demands, interference with family and interruptions with work, predicted their negative mental well-being. In anesthetists, communication in the hospital and perceived control over work are significant in determining job satisfaction and mental well-being. In middle-aged medical graduates generally, the effects of psychological job demands, patient demands, physician resources and work control were studied. High job demands were found to be associated with both "work dissatisfaction" and psychological disorder (GHQ) in univariate analyses. In regression analysis, lack of control over work was independently associated with both dissatisfaction and psychological disorder (Johnson, et.al. 1995). However, stress-health relationship is not linear, it is also moderated by numerous situational, organizational and personal factors like; type of organization, nature of job, job category, family structure, personality traits, future orientation and time management etc. (Caplan, 1979; Mishra & Tiwari, 2008; Pandey & Srivastava, 2004; Rice, 1987).

Future orientation is an important dimension of temporal orientation. Future orientation (F.O.) relates to attitudes and judgments of goal related structuring of time evaluation of future problems and planning for anticipated future behavior. It refers to cognitive elaboration of motivation in means and structure (Nuttin, 1980; Trommsdorff and Lamm, 1980). For individual who primarily look towards the future, the present is only important as it is a preparing ground for future and past is meaningful because it is a precedent of what is following in future. The manifestation of future orientation is based on personality characteristics. It includes planning, causal attribution, thematic structuring as well as situational induction of future orientation. Gjesme (1983) made a distinction between dispositional future orientation and situational arousal of future orientation. Future orientation is aroused and manifests itself as a function of the anticipated valances or importance of the future utility of tasks, events or activities.

This enduring focus on future-oriented thoughts and behavior is represented by such central areas of research in social cognition as self-regulatory processes and standards (Bandura, 2001; Carver & Scheier, 1990), planning, delay of gratification (Mischel, Shoda, & Rodriguez, 1989), reflective cognitive style and beliefs about the incremental nature (Mischel, Shoda, & Rodriguez, 1989). There is increasing interest in the study of temporal factors in judgment (Agarwal & Tiwari, 1988) and decision-making (Tiwari, 1987) and in specific areas of application, such as economic and health decisions. A positive relation between future orientation and decision making, future planning behavior and judgmental processes have also been reported (Agarwal & Tiwari, 1988; Gjesme, 1983). Geis and Gerrard (1984) suggested that future orientation can influence family planning behavior. Later, Pandey and Singh (2004) evinced a relationship between future orientation, family planning attitude and health, behavior and health status of females. Thus, future-oriented thinking which includes plans, goals, daydreams, aspirations, hopes, worries, predictions, expectations, and the various scenarios through which these potential outcomes may or may not be realized – is the stuff of mental life (Austin& Vancouver, 1996; Oettingen, 1996; Olson, Roese, & Zanna, 1996; Taylor & Schneider, 1989). It is also relevant to analyze the mediating role of future orientation in managing time stress.

For becoming aware of the damaging impact of time stress on health, it is quite essential to learn how to organize, fill and pace our time and how to deal with time related stress. In this connection future orientation as a personality disposition and time management strategies are considered important factors which work as buffers in mitigating time stress and its consequences on health.

Thus, time being the most finite and scarce resource, it needs to be planned and managed properly. Durbin (1997) defines time management as the process of structuring and organizing time to result in better productivity.

Discussing the concept of time management, Wainwright (1992) opined that time is finite resource which cannot be recycled like many other resources. Later, Seaward (1999) divided time management techniques into three categories, *i.e.*; prioritizing, scheduling and implementing. Prioritizing refers to, clear what is urgent to get done, what is rather important, and what can wait. The second technique, "scheduling" is time allocation for prioritized responsibilities or the still of matching a specific task or responsibility with a designated time period in which to accomplish it (Rice, 1987). The third technique; "Implementing" is the challenge in the process of time management (Rice, 1987), one can develop a life plan, a set of priorities, and a schedule, but the real challenge lies in the implementation. Important implementation techniques of time management are; assigning time goals, avoiding procrastinating, focusing one's efforts, creating a pleasant environment, finding time for exercise and deep relaxation, taking small breaks and rewarding one's accomplishment. Thus, by exercising strategies of time management one can achieve goals and minimize feeling of time stress.

There is considerable evidence that the stress inherent in health sector, negatively impacts health care professionals. Stress can lead to increased depression, decreased job satisfaction (Flanagan & Flanagan, 2002), disrupted personal relationships (Gallegos, Bettinardi-Angres, & Talbott, 1990), psychological distress (Jain, McLaughlin, & Johnson, 1996); and even suicide (Richings, Khara, & McDowell, 1986). Stress also may harm professional effectiveness: It decreases attention (Smith et.al. 1990), reduces concentration (Askenasy & Lewin, 1996), impinges on decision-making skills (Klein, 1996), and reduces providers' abilities to establish strong relationships with patients (Pastore, Gambert, Plutchik, & Plutchik, 1995).Stress may also lead to increased burnout. Shanafelt et .al. (2002) found that burnout was significantly associated with suboptimal self-reported patient care. Over a decade ago, the medical field identified these problems and called for change, advocating better care for health professionals (Butterfield, 1988). Despite this, call for change, dissatisfaction and distress have continued to increase. Thus, it is clear that health care professionals need support in addressing the numerous stressors inherent in their work.

A close perusal of review of studies reveals adverse impact of stress on medical professionals. However, consequences of time stress on health status of medical professionals and role of future orientation and time management in stress-health relationship are less investigated issues. Against this backdrop, this study was carried out with following objectives:

(i) To explore the association between time stress and illness in medical professionals.

(ii) To assess the role of future orientation in modifying time stress - health relationship.
(iii) To examine buffering role of time management in stress – health relationship.

Based on above objectives, following hypotheses were formulated:

(i) Time stress would be positively related with physical and psychological illness.
(ii) Future orientation would be inversely related with time stress and illness whereas, it would be found positively related with time management.
(iii) Time management would be negatively correlated with time stress and illness.
(iv) Future orientation and time management would serve as mediators in the time stress – health relationship.

METHOD

Design

In the present study, a correlational design was used. Future orientation (FO), time Stress, time management strategies and physical and psychological health of the respondents were assessed.

Sample

A total of 240 medical professionals participated in this study. Stratified random sampling technique was used. Sample selection was selected from two types of hospitals (Government & Private Hospitals), two groups of job category (Doctors & Para medical staff) and two level of future orientation (high & Low). The selection of medical professionals was randomly done from different hospitals of Gorakhpur city.

Tools

1. ***Time Stress Questionnaire:*** The feeling of time stress was assessed by using Time Stress Questionnaire, developed and standardized by Seaward (1999). This questionnaire consists of 33 items measuring time related stress. Out of 33 items, 24 items are positive and remaining 9 items are negative. This is a 11 point scale; positive items are assigned ascending scores (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11) while negative items are scored in reverse order. Total summated score denotes the magnitude of Time stress as a whole. Greater scores indicate more stress and lower scores indicate lesser stress.
2. ***Story Writing Test:*** To assess the level of future orientation in respondents, Story Writing Test was used. This test was originally developed by Mead (1972) and was adapted by Agarwal and Tripathi

(1979) in Indian context. In this test, four sentences in present tense are employed; each related to a minimal achievement in particular area *e.g.* political, economic, educational and professional. Subjects are asked to write / tell a story or possible serial of events on the basis of cue sentences. No instruction concerning whether the serial of event should be written about the past, present or future are given. The co-efficient of correlation was found to be high ($r = 0.70$, $n = 20$) by Spearman Brown formula. Test- retest reliability was also found to be high and significant ($r = 0.79$, $P < 0.01$).

3. ***Time Management Scale:*** The Time Management Scale, developed and standardized by Biswas (1999), was used to assess time management strategies used by medical professionals. This scale includes 21 items which measure six dimensions of time management, namely: Time budgeting, Goal clarity, Prioritizing, Coordination, Check against misuse and Focusing. Items pertaining to these dimensions were rated on five point scale. Items are scored in reverse order (5, 4, 3, 2 and 1). Higher scores indicate better time management, whereas, lower scores show less time management. Both overall time management and strategies of time management could be determined with the help of this questionnaire.
4. ***C.M.I. Health Questionnaire***: Cornell Medical Index (CMI) questionnaire, translated into Hindi by Wig, Prasad & Verma (1983) was used to assess health status of medical professional. This questionnaire contains 195 questions related to physical illness and psychological illness. Each ''yes"is given a score of 1 and "no" a score of 0 .

Procedure

Respondents were contacted at their work place (in hospitals) and they were introduced about purpose of the study. If they volunteered to participate in the study then, they were given Story Writing Test to assess the level of future orientation in participants. Further, respondents were given a booklet containing Time Stress Questionnaire, C.M.I. Health Questionnaire and Time Management Scale. They were requested to respond on each measure. Data was scored and analyzed according to defined rules as given in manuals and scores were subjected to computer analysis using SPSS – 20th version.

RESULTS AND DISCUSSION

Data obtained from respondents were scored and analyzed by using bivariate and multivariate analysis.

Bivariate Analysis

Correlation results revealed positive association between time stress and illness (Table-1).

Table 1: Relationship between Time stress and Health (Illness)

Time stress & Health (Illness)	(r)
Time stress & Physical Illness	0.804**
Time stress & Psychological Illness	0.781**

N =240, ** p< .01, * p< .05

More specifically, a high positive relation between time stress and physical illness was found. Similarly, time stress was found to be positively correlated with psychological illness.

Table – 2 indicates relationship between time stress, future orientation, time management and its strategies. Results revealed that time stress was found to be negatively related with future orientation. Moreover, an inverse relation between time stress and time management (overall) was found. Similarly, time stress was found negatively related with various strategies of time management *i.e.* time budgeting, goal clarity, prioritizing, coordination, check against misuse and focusing.

Interestingly correlation results indicate high positive association between future orientation and time management (as a whole). Moreover, future orientation was found positively linked with various strategies of time management *i.e.* time budgeting, goal clarity, prioritizing, co-ordination, check against misuse and focusing. Various strategies of time management were also found positively related with each other.

Table 2: Relation betweenTime Stress, Future Orientation and Time Management Strategies

Variable	*Future Orientation*	*Time Management*	*Time Budgeting*	*Goal Clarity*	*Prioritizing*	*Coordination*	*Check Against Misuse*	*Focusing*
Time Stress	-0923**	-0.944**	-0.862**	-0.626**	-0.581**	-0.581**	-0.603**	-0.491**
Future Orientation		0.922**	0.866**	0.562**	0.630**	0.545**	0.549**	0.443**
Time Management			0.948**	0.634**	0.630**	0.607**	0.620**	0.455**
Time Budgeting				0.530**	0.586**	0.530**	0.517**	0.308**
Goal Clarity					0.318**	0.425**	0.400**	0.111
Prioritizing					1	0.167**	0.269**	0.145*
Coordination						1	0.269**	0.172**
Check Against Misuse						1	0.167**	

** p< .01, * p< .05

Table 3 shows the that future orientation and time management strategies were found negatively related with physical illness and psychological illness.

Table 3: Relationship between Future Orientation, Time management and Illness

Variables		*Health (Illness)*	
		Physical Illness	*Psychological Illness*
Future Orientation (FO) -.771**		-.784**	
Time Management (as a whole)		-.862**	-.844**
Dimensions of Time Management	**Time Budgeting**	-.881**	-.778**
	Goal Clarity	-.595**	-.467**
	Prioritizing	-.540**	-.520**
	Co-ordination	-.518**	-.500**
	Check Against misuse	-.426**	-.612**
	Focusing	-.278**	-.448**

N =240, ** = p< .01, * = p< .05

More specifically, future orientation was found inversely related with physical illness and psychological illness. Time management (as a whole) was also found negatively correlated with physical and psychological illness. Dimensions of time management were also found negatively related with Physical and Psychological illness. Correlations between the dimensions of Time budgeting, Goal clarity, Prioritizing, Coordination and physical health were higher than those with psychological health while for Check against misuse and Focusing the correlations were higher with psychological health.

Results obtained from bivariate analysis report a close positive association between time stress and illness (Physical & Psychological). Further, a positive link between future orientation and time management was found. Contrary to this, future orientation and time management (overall & strategies) showed negative link with time stress and illness.

Based on the perusal of correlation results, it was considered appropriate to go for step-wise multiple regression analysis (SMRA) to examine the relative contribution of antecedent factors (*i.e.* future orientation and strategies of time management) in the criterion variables *i.e.* time stress and health (Physical and Psychological illness). Results are interpreted below:

Regression results (Table-4) indicate that time stress and health (illness) was strongly predicted by future orientation as a dispositional characteristic of medical professionals.

Table 4- Step Wise multiple Regression Analysis for Time stress and Health (Illness) on to the Future orientation

Predictor Variable	*R*	*R2*	*R2 Change*	*Beta β*	*F Value*
			(Criterion Variable) **Time Stress**		
Future orientation	.923[a]	.851	.851	-.923	1361.784***
			Physical (Illness)		
Future orientation	.771[a]	.595	.595	-.771	349.263***
			Psychological (Illness)		
Future orientation	.784[a]	.615	.615	-.784	380.014***

N =240, *** = P< .001, ** = P< .01, * = P< .05

As is apparent from table-4, future orientation has contributed inversely (85.1%) to time stress. Likewise, future orientation has inversely contributed to physical illness (59.5%) as well as psychological illness (61.5%). Thus, future orientation appears to have a pervasive role in minimizing stress as well as illness.

Regression results (Table-5) denote that time stress was predicted by six factors which are time budgeting, focusing, goal clarity, check against misuse, co-ordination and prioritizing.

Table 5: Step wise multiple regression analysis for Time Stress on to the Strategies of Time Management (Predictor Variable)

(Predictor Variable) *Strategies of Time Management*	*R*	*R2*	*R2 Change*	*Beta β*	*F Value*
			(Criterion Variable) **Time Stress**		
Time Budgeting	.862	.743	.743	**-.862**	687.375***
Focusing	.894	.799	.056	**-.249**	66.349***
Goal clarity	.920	.845	.046	**-.255**	70.927***
Check against misuse	.931	.867	.021	**-.174**	37.772***
Co-ordination	.947	.897	.018	**-.168**	41.891***
Prioritizing	.938	.879	.012	**-.136**	23.477***

N =240, *** = P< .001, ** = P< .01, * = P< .05

As table-5 indicates, time budgeting has contributed maximum negatively followed by focusing, goal clarity, check against misuse, co-ordination and prioritizing. Though independently, time budgeting explained 74.3%, followed by focusing 5.6%, goal clarity 4.6%, check against misuse 2.1%, co-ordination 1.8% and prioritizing 1.2% but the composite contribution of these factors were found 87.9% variance in criterion variable.

Regression results displayed in Table-6, denote that physical illness was predicted by three factors which are time budgeting, goal clarity and check against misuse.

Table 6: Step wise multiple regression analysis for Physical Health (Illness) and Psychological Health (Illness) on to the strategies of Time Management

(Predictor Variable) *Strategies of Time Management*	*R*	*R2*	*R2 Change*	*Beta β*	*F Value*
		(Criterion Variable) **Physical Illness**			
Time Budgeting	0.881	0.776	0.776	-0.881	826.02***
Goal clarity	0.894	0.799	0.023	-0.178	26.75***
Check against misuse	0.896	0.803	0.004	0.073	4.56*
		Psychological Illness			
Time budgeting	.778	.606	.606	-.778	365.6***
Check Against Misuse	.816	.666	.060	-.286	42.6***
Focusing	.844	.713	.047	-.228	38.7***
Prioritizing	.860	.739	.016	-.158	14.0***
Co-ordination	.851	.724	.011	-.121	9.01***

N =240, *** = P< .001, ** = P< .01, * = P< .05

Specifically, time budgeting explained maximum negatively followed by goal clarity and check against misuse. Though independently, time budgeting has predicted maximum negatively *i.e.* 77.6%, goal clarity explained 2.3%, and check against misuse explained 0.04% of variance. But the composite contributions of these factors were found 80.3% variance in physical health (illness).

It is also clear from regression results (Table – 6) that psychological health was predicted by five strategies of time management. Time budgeting explained maximum negatively, followed by check against misuse, focusing, prioritizing and co-ordination. Independently, Time budgeting explained 60.6 %, check against misuse explained 6 %, focusing 4.7%, prioritizing 1.6% and co-ordination explained 1.1% but the composite contributions of these factors were found 73.9% variance in psychological health (illness).

It is clear from present findings that future orientation and various strategies of time management exerted positive role in minimizing feeling of time stress and its outcome on health status of medical professionals.

Present findings have been discussed under two major sections. First part interprets the association between future orientation, time management, time stress and health (illness), and in second section the modifying role of future orientation and time management in time stress and health has been discussed on the basis of regression results. Findings have been discussed in relation to a number of other empirical evidences.

Correlation results proved close associations between future orientation, time management, time stress and health. Time stress was found to be positively related with physical and psychological illness. Contrary to this, future orientation (FO) and time management (TM) and its various strategies *i.e.* time budgeting, goal clarity, prioritizing, coordination, check against misuse and focusing were found to be inversely related with time stress, as well as physical and psychological illness. Further, regression results denote differential roles of future orientation and time management in time stress and health (illness). FO and time management have exerted positive role in mitigating high feeling of stress related to time as well as physical and psychological illness. In other words, time stress – health relationship was significantly modified by future orientation and time management. Results thus, indicate that time stress-health relationship is not linear but is also moderated by future orientation and time management strategies.

Time Stress – Health Connection

Present results proved that time stress was found positively linked with physical and psychological illness. This result has ample empirical supports. Previous studies have proved the adverse consequences of stress related to work/ time on heath (Cartwright & Cooper, 1994; Pandey & Srivastava, 2004; Pandey & Pandey, 2013). When the stress is excessive, it overtaxes individual's resources and leads to breakdown on integrated functioning. Such outcomes include emotional problems, mental illness, physical illness and social deviance (Rice, 1987). According to Rose (2003), employees have tendency towards high level of stress regarding time, working for longer hours which reduces employees urge for performing better. Other studies have also proved adverse consequences of stress on health, which include; increased heart rate and blood pressure, cardiovascular disease, gastrointestinal disturbance, headaches, hypertension, fatigue and sleep disturbance etc. (Maslach, Schaufeli & Leiter, 2001). Stress may affect not only the individual, but also his/her family life, marriage and social life (McManus, Winder & Gordan, 2002). Earlier, Pandey and Srivastava (2004) reported a positive relationship between stress (work) and illness in career women. They also found that job category, joint/ nuclear family structure and job tenure exercised influence on extent of work stress, coping and illness. In another study, Shukla (2010) evinced that work stress was found positively linked with physical and psychological illness in teachers. Time management exerted favorable role in controlling work stress consequences.

Not only job in itself but also the quality of job was found to be related with stress feeling (Thakar & Mishra, 1999; Tiwari, 2006). Other studies report that time stress can lead to increased depression in medical professionals, decreased job satisfaction (Flanagan & Flanagan, 2002), disrupted personal relationships (Gallegos, Bettinardi, Angres, & Talbott, 1990), psychological distress (Jain, McLaughlin, & Johnson, 1996); and even suicide (Richings, Khara, & McDowell, 1986). It may also harm medical professional effectiveness: It decreases attention (Smith et.al., 1990), reduces concentration (Askenasy & Lewin, 1996), impinges on decision-making skills (Klein, 1996), and reduces professionals' abilities to establish strong relationships with patients (Pastore et.al., 1995).

Future Orientation as Modifier in Time Stress– Health Relationship:

Bivariate and multivariate results depicted that future orientation was found to be inversely related with time stress and illness but positively linked with time management and its strategies. Regression results have also proved the differential roles of future orientation in time stress and health. Present findings have been strongly supported by other researches. Studies have proved the positive role of future orientation in minimizing stress and enhancing person‘s health and wellbeing (Pandey & Singh, 2004; Singh, 2002). In a recent study Pandey and Pandey (2015) identified inverse relationship between future orientation and time stress. Pandey and Yadav (2013) conducted a study on rural sample and strongly proved that future orientation and health education worked positively in promoting reproductive health knowledge and behavior in rural women, which in turn exerted favorable impact on improving overall health status in rural community. Other researchers have also identified positive impact of future orientation on knowledge, judgmental process, achievement motivation, delay of gratification and reproductive health behaviour (Agarwal & Tiwari, 1988; Geis & Gerrard, 1984; Pandey, 2001, 2012; Singh, 2002; Tiwari & Agarwal, 1989). In another study Pandey (2011) found that after attending health promotion intervention program, high future oriented (H.F.O.) group expressed better knowledge, reproductive health behavior and superior health status as compared to low future oriented females. Moreover, a compatible relationship between reproductive health knowledge, attitude and health behaviour in HFO group was found. High future oriented females tended to pay more attention to message which had future utility for better health. Therefore, they expressed better knowledge about reproductive health issues and also exercised more health behaviour as compared to low future oriented (L.F.O) females.

High future oriented people have a tendency to pay more attention towards information having future utility. They have better planning, goal settings and optimism; therefore, they tended to acquire such information which includes health planning and maintaining health. However, Poor health status in L.F.O. group is quite possible because they were found unaware, ignorant and did not show tendency to pay attention towards information having future utility or effort to improve health status. This pattern was also identified in present study in which medical professionals having high future oriented outlook tended to plan and set working schedules according to priorities and therefore, reported less time stress than low future oriented (L.F.O.) medical professionals.

Buffering Role of Time Management in Time Stress– Health Relationship:

Present results depicted that time management was found to be inversely related with time stress. Regression results also denote that strategies of time management *i.e.* time budgeting, goal clarity, prioritizing, coordination, check against misuse and focusing were found as strong predictors of time stress. Findings have been discussed in the context of numbers of other empirical evidences. Results further proved that time management and its various domains were found to be inversely associated with physical and psychological illness. Regression results also confirmed the buffering role of time management in health. Professionals who exercised positive strategies of time management reported less feeling of stress related to time. Thus, results have proved the hypothesis that time management worked as buffer in time stress- health relationship.

Present findings are supported by other researches. Drucker (1967) found that managers expressed high time stress and reported 25% controllable time while 75% time uncontrollable. In such situations, time management strategies may play a significant role in mitigating ill consequences of time stress on health status of managers. Other studies also evinced that time management has positive link with dispositional characteristics of future orientation; like goal setting and planning. (Agarwal & Tiwari, 1988; Pandey & Singh, 2004). People having future oriented outlook also show better planning and prioritizing capacity and therefore, may effectively minimize the adverse consequences of time stress on health and wellbeing. Time management has been shown to be related to college grades (Britton & Tesser, 1991), academic performance (Burt & Kemp, 1994), and study habits (Bond & Feather, 1988). Moreover, a study showed that students perceived poor time management was a reason of examination failure (Ling, Heffernan, & Muncer, 2003).

So, present results may help medical professionals and students to prevent harmful effects caused by poor time management, high levels of stress and poor sleep quality. Researches demonstrate that time management strategies can effectively reduce stress, anxiety, and depression in both clinical and nonclinical population (Miller, Fletcher, & Kabat Zinn, 1995; Shapiro, Schwartz, & Bonner, 1998).

Perceived control of time is also found linked with stress-related outcomes, such as grade point average (Britton & Tesser, 1991). Time management behavior negatively related to job-induced and somatic tension, was mediated by perceived control of time (Claessens, Van Eerde, Rutte, & Roe, 2007). Since, perceived control of time is associated in a similar way to time management disposition.

Besides, not only perceived control of time contributes to lessen stress but also setting goals, priorities and mechanisms of time management. Claessens et al. (2007) have found that setting goals and priorities lead to more control and therefore less strain, more satisfaction and feeling more productive were identified in employees. Additionally, mechanisms of time management are negatively related to self-punishment behavior (Griffiths, 2003). It may seem to increase distress. Seaward (1999) has suggested that by exercising a set of techniques of time management *i.e.* prioritizing, scheduling and implementing, one can develop a life plan, a set of priorities, schedule and their implementation in real life and in this way one can manage time related stress caused by uncontrollable time table or scheduling. For this, certain efforts can be made *i.e.* assign time goals, avoid procrastinating, focus to efforts, create a pleasant environment, make time for exercise and deep relaxation, take small breaks and reward one's accomplishment. These efforts increase time management behavior and in turn exercise positive impact to buffer time stress – health link.

Time management was found to be inversely related with physical illness and psychological illness. Regression results also confirmed the modifying role of time management in health. These findings have been supported by several other studies (Rice, 1987; Pandey & Pandey, 2014; Tiwari, 2010). The buffering roles of such time management and coping resources have been identified in a number of other studies. (Pandey & Srivastava, 2004; Rice, 1987). Studies report that time management increases active and adaptive coping with stress and decreases maladaptive coping responses in individuals (Biswas, 1999; Pandey et. al, 2015). The coping style and time management strategies which person apply to confront stressful situation are viewed important in mitigating stress – health/ commitment relations (Lazarus & Folkman, 1984; Singh & Pandey, 2013). However, some researchers have shown that there is a meaningful relationship between time management, behavior, and stress (Macan, 1994). Another, research indicate that instead of actually using time management behaviors, perceptions about the structure and purposes of time use might be useful in reducing worry (Kelly, 2005). Adam et.al. (2007) found direct link between time management and sleep quality. Inconsistent sleep schedules brought about poor sleep quality (Cheung, 2003). This revealed an oblique connection between time management and sleep quality and inconsistent sleep schedules as a mediator in indirectly linking up time management and sleep quality. Therefore, present findings have proved the positive roles of future orientation and time management in minimizing time related stress and its ill consequences on health of medical professionals.

CONCLUSION

Findings of this study evinced direct positive link between time stress and health (illness). However, these relations were mediated by future orientation and time management strategies *i.e.* time budgeting, goal clarity, prioritizing, coordination, check against misuse and focusing. More specifically, a positive link between time stress and illness was found. Obtained results can be interpreted in the light of work place related model of stress and illness (Cooper et. al., 1976). The various sources of stress including time pressure cause negative feelings in professionals; as a result, they express various symptoms and consequently receive poor health. However, professionals having future oriented outlook showed tendency to lessen time related stress by planning, goal setting etc. A number of facets as a part of duty *i.e.*; long working hours, emergent duty and time stress cause negative feelings in medical professionals; consequently they may develop mismanagement of time. In this connection, future orientation worked as strong modifier in minimizing time stress and enhancing time management strategies, which in turn worked as buffer to check ill effects of stress on health.

The present study has established a framework that is found to be interlinked with the existing literature too. However, this study attempts to provide some methodical and practical recommendations that may help the future researchers and scholars in various respects. First of all, it can be suggested that the effect of other demographic variables like designation, tenure and salary and cultural factors should be considered while explaining the future orientation and time management in further studies. Second generalization of the results from this study is limited as the sample was confined to one region of Uttar Pradesh. Thirdly, researchers should implement some situational test in addition and exercise other qualitative analysis to support present findings.

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FAMILY ENVIRONMENT AND SELF-EFFICACY AS PREDICTORS OF ADJUSTMENT AMONG FEMALE ADOLESCENTS

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ABSTRACT

In the period of adolescence, family environment as well as self-efficacy plays an effective role in different areas (Home, Health, Social and Emotional) of adjustment, especially in females. To study the role of these variables in different areas of adjustment, the present study was planned. The objectives of the study are to examine the relationship between measures of self-efficacy and family environment with home, health, social and emotional adjustment, and to identify the predictors of each area of adjustment (home, health, social & emotional). A total sample of 102 female adolescents between the age range of 14 and 16 years were selected for the present study. The female adolescents were assessed with, Bell's Adjustment Inventory (Hindi Adaptation), Family Environment Scale and self-efficacy questionnaire. The data were analyzed by using Pearson's Product Moment method of correlation, and Stepwise Regression analysis. The results revealed that (i) Home adjustment was found to have a significant negative relationship with Intellectual Cultural Orientation, Achievement Recreation Orientation, Moral Religious Emphasis and Organization whereas positive significant association was found between home adjustment and Conflict, (iii) Stepwise regression analysis found only one predictor of home adjustment i.e., Organization, whereas active recreational orientation was identified as a predictor of health adjustment. Further analyses revealed that social self efficacy, Intellectual Cultural Orientation and Achievement Recreation Orientation significantly predict social adjustment among female adolescents, while emotional adjustment was predicted by two variables, i.e. social self-efficacy and conflict.

Key Word: Adjustment, Family Environment, Orientation, Self-efficacy

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Adjustment is a kind of interaction between the individual and his or her environment. In other word adjustment is a lifelong process and can be defined as a person's interaction with his environment. In the words of Lazarus: "Adjustment consists of the psychological process by means of which the individual manage or copes with various demands or pressures."

ADJUSTMENT AND FAMILY ENVIRONMENT

Family is a primary socialization unit and is, therefore, considered to be a very important factor influencing the development of a child (Ozcinar, 2006). In the stage of materialization and modernization, adolescents are facing more adjustment problems as compared to earlier generations. Adolescence introduces a period of significant transition in family and social role expectations, coupled with increase in the range of intimate and social relationships (Buhrmester & Wndol, 1987, Selman, 1980). Adolescence is a rapid transition from a dependent relationship with parents to mutually independent relationship with others (*e.g.* peers and intimate partners). The term adjustment is often used as a synonym for accommodation and adaptation. A number of studies (LeDoux, Blakeney &Herndon, 1998, Leslie 2004) found relationship between adjustment and some components of family environment *i.e.* Cohesion, Expressiveness, Organization and Conflict. The patterns of interaction and behaviour of the family members play a vital role in the behaviour and adjustment patterns of an individual (O Leary, 1995).

Adjustment and Self-efficacy

Kim and Cicchetti (2003) investigated the relations between maltreatment, social self-efficacy, and behavioural adjustment. They found that younger maltreated children with higher level of social self efficacy showed significantly less internalizing problems compared to younger maltreated children with lower level of social self efficacy. Claudia (1996) found that perceived self efficacy was related with lower mental health problems. Rutger and Williams (2005) examined the relationship between self-efficacy, emotional adjustment and problem like smoking in a large sample of early adolescents. Self-efficacy and adjustment appear to be positively related. Bandura (1986) stated that a strong sense of self-efficacy about ability and competence will help individuals to adapt emotionally.

Maddux and Meier (1995) and Maddux (1995) stated that a strong sense of self-efficacy will also help individuals approach challenging situations without incapacitating anxiety and confusion. Wheeler and Ladd (1982) have examined the role of social forms of efficacy in promoting peer interactions in promoting social adjustment (Connolly, 1989) and more recently the relationship between social self-efficacy and academic self-efficacy (Patrick, Hicks and Ryan, 1997).

The present study was aimed at exploring adjustment in different areas (home, health, social and emotional) among a non-clinical sample of adolescent, in the light of family environment and self-efficacy. The generation of such knowledge explored is essential for better understanding of role of family environment as well as self – efficacy in home, health, social and emotional adjustment in different areas among female adolescents.

The objectives of the study were:

1. To study the relationship among the dimensions of family environment & self-efficacy with different areas of adjustment (home, health, social and emotional).
2. To study the predictors of adjustment (home, health, social & emotional) among female adolescents.

In the present study, the purposed hypotheses were:

1. Measures of adjustment are likely to show negative association with family environment as well as measures of self efficacy.
2. Some family environment and self efficacy measures would significantly predict different areas of adjustment among female adolescents.

METHOD

Sample

The present study was conducted on a sample of 102 female adolescents with age range of 16 to 18 years, who are studying in XI and XII classes. The sample was selected using stratified random sampling procedure from two districts of Haryana. All the schools were having same educational affiliation and catered to the needs of low to high socio economic status students.

Tools

Following tools were used for the collection for the relevant data:

Bell Adjustment Inventory (Hindi adaptation), Mohsin & Shamshad (1969): In the present study, Hindi adaptation of Bell adjustment Inventory was used. Mohsin – Shamshad adaptation of Bell Adjustment inventory (Hindi adaptation) consists of 135 items, which measured adjustment in four different areas – Home, Health, and Social and Emotional adjustment. – It yields a separate score as well as composite score for overall adjustment. Home adjustment is expressed in terms of satisfaction of dissatisfaction with home life. Health adjustment in terms of illness, Social adjustment in terms of shyness, submissiveness, introversion, and emotional adjustment in terms of depression, nervousness etc. High score on the inventory indicate low adjustment, and low score indicate high adjustment in different specific areas.

Family Environment Scale (Moos and Moos, 1981): The Family Environment Scale (FES) was developed to measure social and environmental characteristics of families. Three separate forms of the FES are also available; Form R of the scale was used in the present study that contains ten dimensions which are broadly divided in three dimensional conceptualization of a family. The ten FES subscales assess three underlying domains or sets of dimensions:

1. Cohesion. Expressiveness and conflict subclass measure the relationship dimension.
2. The personal growth or goal orientation dimensions are measured by the Independence, Intellectual-Cultural orientation, Achievement orientation, Active recreational orientation and Moral religious emphasis subscales.
3. The system maintenance dimensions are measured by organization and control subscales.

Internal consistency reliability estimate for the Form R subscale range from .61 to .78. Test-retest reliabilities for the Form R subscales with 2 months, 3 months and 12 months interval range from .52 to .91.

Self-Efficacy Questionnaire (Muris, 2002): The Self Efficacy Questionnaire contains 24 items that represent three domains of self efficacy - social self efficacy that deals with the perceived capability for peer relationship and assertiveness, Academic Self efficacy that is concerned with the perceived capability to manage one's own learning behavior, to master academic subjects and to fulfill to the academic expectations and in Emotional Self Efficacy that pertains to perceived capability of coping with negative emotions. Each item has to be scored on a 5-point scale, which represent 1 "not at all" and 5 "very well". The internal consistency reliability of the SEQ-C appeared to be satisfactory. Cronbach alpha was .88 for the total self-efficacy scores and between .85 and .88 for subscale scores. The internal consistency of SEQ was also sufficient (r = .79).

Procedure

In the initial stage, the participants were contacted in their respective classes and their willingness to participate in the study was obtained. The female subjects were first administered with Bell Adjustment Inventory and family environment scale. After that self-efficacy questionnaire was administered on the girl students. All the subjects were assured that their responses would be kept confidential and would not affect their overall performances in the school.

RESULTS AND DISCUSSION

In order to meet major research objectives, the obtained data were processed for various statistical analyses pertinent to research objectives of the study. Correlations among variables were obtained by applying Pearson product moment method. In order to have a parsimonious picture of contribution of different variables on home, health, social and emotional adjustment, stepwise multiple regression analysis was applied. The results are described as under:

Table 1. Correlation between dimensions of Adjustment (Home, Health, Social & Emotional) and Family Environment measures

Family Environment	*Adjustment*			
	Home	*Health*	*Social*	*Emotional*
Cohesion	-.11	.02	.043	-.08
Expressiveness	-.16	-.04	-.072	**-.20***
Conflict	**.27****	.06	.092	**.23***
Independence	.01	-.13	-.029	.02
Achievement Orientation	-.07	.16	-.15	.10
Intellectual Cultural Orientation	**-.20***	-.07	**-.31****	-.13
Active Recreational Orientation	**-.23***	**-.24***	**-.31****	-.14
Moral Religious Emphasis	**-.29****	.11	.029	-.11
Organization	**-.40****	-.06	**-.30****	-.15
Control	-.02	-.04	-.033	-.02

**p< .01 level *p<.05 level

The correlations between home adjustment and measures of family environment range between .27 and -.40. Some components of family environment like Intellectual cultural orientation, Active recreational orientation, Moral religious emphasis and Organization have significant negative association with home adjustment whereas Conflicts have positive significant relationship with home adjustment. Since lower score on adjustment was indicant of better adjustment, a negative correlation implied a positive relationship. The present results received support with the study of Johnson et al. (2001) as concluded that decreased family cohesion can be associated with problems in adolescent's social interactions. Research regarding level of family conflict suggests that a conflict family environment is associated with adolescent's insecurity and psychological distress, as well as aggressive behaviour and conduct disorder (Wissink et al., 2006). Some of the earlier studies in this field (Ledoux et al., 1998; Leslie 2004) found relationship between adjustment and some components of family environment *i.e.* Cohesion, Expressiveness, Organization and Conflict. Herman, Ostrander and Tucker (2007) also found that family cohesion and supportive relationships between family members are associated with adolescent psychological adaptation and lower depression. In recent studies in India, which family environment has been reported to have a significant effect on the adjustment patterns of the female students (Mohanraj and Latha, 2005; Sharma & Joshi, 2009; Sharma and Joshi, 2010; Ramaprabou, 2014, Sharma and Joshi, 2015).

Active recreational orientation, a measure of family environment has significant negative correlation with health adjustment among female adolescents. Since lower score on adjustment was indicant of better adjustment, a negative correlation implied a positive relationship among female adolescents and vice - versa. The present results revealed that the high degree of participation in social and recreational activities explored better health adjustment among female adolescents. Some components of family environment like Intellectual cultural orientation and Active recreational orientation Organization have significant negative association with social adjustment. These results verify that student's participation in different activities may be set the high social adjustment. All the measures of family environment have no significant association with emotional adjustment except the two measures of family environment *i.e.*, expressiveness and conflict. Expressiveness has significant negative association with emotional adjustment whereas Conflicts have significant positive relationship with emotional adjustment among girl's students. Since lower score on adjustment was indicant of better adjustment, a negative correlation implied a positive relationship and vice-versa. The results revealed that more the conflict among family, the poorer will be the emotional adjustment level among female adolescents.

Table-2. Correlation of overall Adjustment with different dimensions of Self-efficacy

Self-Efficacy	*Correlation*
Academic Self-efficacy	-.15
Social Self-efficacy	-.33**
Emotional Self-efficacy	-.21*
Total Self-efficacy	-.31**

**p< .01 level *p<.05 level

There is significant association between social self efficacy and emotional self-efficacy with overall adjustment among female students. The results clearly demonstrate that the female adolescents who are having high self-efficacy exhibited high adjustment in health, home, social and emotional areas. The social and emotional self-efficacy was found to be negatively associated with adjustment respectively (r=.-33) and (r=-.21), a negative correlation implied a positive relationship among female adolescents. It shows that female adolescents who have high on social self-efficacy and emotional self-efficacy, their overall adjustment is better than others.

As high scores on adjustment scale shows poor adjustment, so the results can be interpreted in the way that highly social and emotional self efficacious female adolescents have better adjustment. Overall adjustment clearly shows significant relationships with social and emotional self efficacy. The results clearly show that female adolescents who are high on all three aspects of self efficacy have better adjustment. Hoeltje, Zubrick, Silburn and Garton (1996) also reported that overall adjustment is significantly associated with social and emotional self efficacy. Earlier studies also show consistent results in the relationship of adjustment and self efficacy among adolescents (Claudia, 1996; Engels, Noom & Vries, 2005; Rutger & William, 2005; Sharma & Joshi, 2009). The results also confirm the hypothesis regarding the relationship between self efficacy and adjustment. High academic self-efficacy likely helps students approach challenging situations without incapacitating anxiety or confusion. This high self-efficacy likely helps them feel that they have the ability and competence to deal with academic situations and problems. As a result, they would experience a better academic adjustment. Earlier studies did not show a consistent trend regarding the relationship between these components. Some of the studies (Claudia 1996) indicated that perceived self efficacy was related with mental health problems. More studies are needed with these variables to have a better understanding of the relationship between these variables.

Since one of the objectives of the study was to examine relative predictive value of family environment and self efficacy for predicting adjustment among adolescents, multiple regression analysis was considered as one of the most pertinent statistics. The model that suits this aim is stepwise multiple regression. Table- 3 shows the results to stepwise regression analysis for the dependent measure home adjustment. The analysis revealed only one significant predictors of family adjustment with an overall multiple R of .403.

Table 3. Regression Analysis (Stepwise)
Dependent Variable-Home Adjustment

Variable	*R*	*R²*	*β*	*F*	*Sig.*
Organization	.403	.162	-.403	18.61	.000

Organization being most pertinent predictor of home adjustment, it entered the equations at step one. The R for this variable equals to .403. It indicates that Organization in the family is a very strong predictor of family adjustment among female adolescents. Organization explains 16% variance in home adjustment. The obtained results indicated that if the family members have better organization than home adjustment would be better among female adolescents. The present finding is consistent with earlier study by Sharma and Joshi (2010). In Sharma's study, the main predictors are family organization and Expressiveness. So the present study confirmed that family environment play important roles in home adjustment especially female adolescents.

Table- 4 shows the results to stepwise regression analysis for the dependent measure health adjustment. Here also, one significant predictor of Health adjustment emerged with an overall multiple R of .237.

Table 4. Regression Analysis (Stepwise)
Dependent Variable-Health adjustment

Variable	*R*	*R^2*	*β*	*F*	*Sig.*
Active Recreational Orientation	.237	.056	-.237	5.694	.000

ARO being most pertinent predictor of Health adjustment, it entered the equations at step one. The R for this variable equals to .237. It indicates that ARO in the family is a very strong predictor of health adjustment among female adolescents whereas explains 5% variance in health adjustment.

Table 5. Regression Analysis (Stepwise)
Dependent Variable-Social adjustment

Variable	*R*	*R^2*	*β*	*F*	*Sig.*
Social Self-efficacy	.389	.151	-.387	17.01	.000
Active Recreational Orientation	.499	.249	-.244	12.38	.001
Intellectual Cultural Orientation	.548	.300	-.238	6.97	.010

However, with regard to social adjustment, the results of stepwise regression analysis show three predictors of female social adjustment. The predictors are, social self-efficacy, Active recreational Orientation and Intellectual cultural orientation, which jointly account for 30% of the variance (R^2 =.300) in social adjustment of the female adolescents. Social Self-efficacy, a measure of self-efficacy entered as the most significant predictor at step one, with a multiple R of .389. The F ratio of this step equals to 17.01. Social Self-efficacy explains 15% variance in social adjustment. The next pertinent predictor of social adjustment is ARO with the entry after social self-efficacy at step two. Active recreation orientations among family members clearly determine the social adjustment of the female adolescents. ARO a dimension of family environment individually explains 10% variance in social adjustment. The next predictor of social adjustment at step three is ICO with the entry after ARO.

Social self efficacy, a measure of self efficacy is found to be the main predictors of social adjustment. Robert et al (2001) also reported that baseline self efficacy is a main predictor of Adult Adjustment to Sickle Cell Disease. Relationships between self-efficacy and adjustment to sickle cell disease are affected, as well as the feasibility and effectiveness of enhancing self-efficacy beliefs as a means of improving adjustment to sickle cell disease (Roert, Joseph, Telfair, Heather & Jennifer, 2001). Sharma and Joshi (2009) found the academic self efficacy as a predictor of adjustment among adolescents. Both studies confirm the role of self efficacy in adolescent's adjustment. It is further concluded that high social self efficacy determines better overall adjustment among female adolescents. The results showed that social adjustment is significantly predicted by family environment.

Table 6. Regression Analysis (Stepwise)
Dependent Variable-Emotional Adjustment

Variable	*R*	*R²*	*β*	*F*	*Sig.*
Social Self-efficacy	.264	.072	-.264	11.85	.000
Conflict	.479	.213	.154	7.2	.000

The results of stepwise regression analysis revealed two significant predictors of female emotional adjustment. The predictors are, social self-efficacy and Conflict, which jointly account for 21% of the variance (R^2 =.213) in emotional adjustment of the female adolescents. Social Self-efficacy a measure of self-efficacy with the entry at step one, exhibited a multiple R of.264. The F ratio of this step equals to 11.85. Social Self-efficacy explains 7% variance in emotional adjustment. The next pertinent predictor of emotional adjustment is conflicts with the entry after social self-efficacy at step two. Conflicts among family members clearly determine the adjustment of the female adolescents. Conflict a dimension of family environment, individually explains 14% variance in emotional adjustment. More the conflict, the poorer will be the adjustment. Family environment plays a very important role on the emotional adjustment of female adolescents to understand the social adaptation pattern (McFarlane Bellissimo and Norman, 1994; Wissink, Dekovic and Meijer, 2006). Family environment influences adolescent's psychological adjustment to a large extent (Jewell and Stark, 2003). The findings of the present research study also inferred that social self-efficacy and conflict do have a significant effect on the emotional adjustment patterns of female adolescents (Sharma and Joshi, 2015). This is in accordance with the study of Enos and Handal (1985), which states that adolescent psychological adjustment, and satisfaction is significantly related to level of perceived conflict in the family.

CONCLUSION

From the above results it may be concluded that all the family environment factors, *i.e.,* Expressiveness, Conflict, Achievement orientation, Active Recreational Orientation, Intellectual Cultural Orientation, Moral religious emphasis and Organization together showed significant effect as well as contribution in different areas of adjustment (home, health, social & emotional) among female adolescents. In this sense, it is likely that adolescents from supportive families feel approved, accepted, and loved by family members, creating a feeling of self-worth and confidence in personal capabilities. Additionally, supportive families can be sources of feedback that foster the development of cognitive, emotional, and behavioral repertoires so that adolescents can deal with different situations in an effective manner. The present research provides evidence that positive perceptions of family relationships may contribute to adolescents' adjustment in different areas (home, health, social and emotional). However, it is important to note that the family environment is a shared environment, since individuals share genes, experiences, beliefs and they are exposed to how parents express affection, establish relations of hierarchy, among others. The study suggests that adjustment in female adolescents can be increased by having better organization, expressiveness, Achievement Orientation, Intellectual Cultural Orientation, Moral Religious Emphasis in the family as well as by reduced the conflict level between the family members. On the other aspect, high self-efficacious approach in social would be lead better adjustment of all areas especially in girl adolescents.

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EMOTIONAL STATES OF TRAUMATIC PATIENTS: PRE AND POST INTERVENTION

Rachana Kumari and Anjana Mukhopadhyay***

ABSTRACT

When a person experiences a traumatic event, s/he may have a strong emotional reaction. This reaction may disrupt the person's ability to function at the scene of the incident or later, and may ranges from a normal stress response to the symptoms indicative to post traumatic stress disorder (PTSD). The literature indicates that intervention plays an important functional role in coping with trauma symptoms. Present investigation discusses the difference between emotional states of the trauma patients' pre and post intervention. To assess the intensity of traumatic symptoms among patients PTSD checklist-civilian version (PCL-C) was administered. Emotional states of the sample were measured with the help of Eight State Questionnaire. As hypothesized trauma affected patients initially reported significantly high level of emotional states in terms of anxiety, stress, depression, regression, fatigue, guilt and arousal all of which have reportedly gone down after intervention. Extraversion the sociable emotional states however reported a significantly lower mean initially among the trauma subjects and improved after the intervention contrary to the assumption.

Key Words: Emotional States, Intervention, Traumatic Patient, Traumatic Stress Disorder

The event or trauma is usually life-threatening, or at least capable of producing bodily harm and it typically involves either interpersonal violence or massive disaster (*e.g.*, rape, assault, torture, terrorism, car or plane crashes, earthquake,

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tornado, or flood). According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), defined trauma as psychological reaction of a person with behavioural symptoms 'to actual or threatened death, serious injury, or sexual violence' (APA, 2013).

Traumatic events have in common the ability to elicit intense and immediate fear, helplessness, horror and distress. These subjective responses lead to a cascade of adverse psychological reactions that can result in the symptoms of PTSD and the resultant disability is associated with this condition. Trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional, or spiritual well-being (Substance Abuse and Mental Health Services Administration, 2012). Extreme traumatic events, such as deliberate (*e.g.* torture) and accidental (*e.g.* motor vehicle accidents, MVA) man-made traumatic events andnatural disasters, are direct precipitants of post-traumatic stress disorder (PTSD) (American Psychiatric Association, 1994).

Intervention aims to modify existing skills, practices to prevent undesirable actions and to provide desirable changes. Further it is a process to enter into an ongoing system of relationship and to come between or among persons, groups or objects for the purpose of helping them. Early intervention such as *psychological debriefing* has been used increasingly to treat psychological trauma in the decade of 70s. Psychological debriefing is a generic term for a brief crisis intervention that is usually delivered within several days of traumatic event and is designed in part to mitigate emotional distress and to prevent long-term psychopathology, especially significant symptoms of PTSD (Raphael & Wilson, 2000). Kenardy (2000) suggested that psychological debriefing is a set of procedures including counselling and providing information aimed at preventing psychological morbidity and aiding recovery after a traumatic event. During a psychological debriefing, participants are encouraged to provide a full narrative account of the trauma that encompasses facts, cognitions and feelings. In addition, emotional reactions to the traumatic event are considered in some detail, with the emphasis on normalization. Although, there are cogent humanitarian reasons to provide mental health interventions to people soon after exposure to trauma, there is a growing consensus that early intervention for trauma, generally called psychological debriefing does not prevent subsequent psychopathology (Wilson, Raphael, Meldrum, Bedosky, & Sigman, 2000).

Mitchell and Everly (1996) achieved successful psychological debriefing through a series of seven phases or stages. These phases are introduction phase, fact phase, thought phase, reaction phase, symptoms phase, teaching phase and re-entry phase. Sufficient reports are available in favour of various psychotherapeutic measures which can help people with traumatic experience.

Cognitive behavioral therapy is one of them. Bryant, Harvey, Dang, Sackville, & Basten, 1998) reported a successful CBT program for recently traumatized individuals. The brief cognitive behavioral interventions described by Foa, Hearst-Ikeda, & Perry,1995) and Bryant et al., (1998) represent encouraging attempts to prevent the development of chronic post traumatic pathology in recent trauma victims. The CBT approaches of Foa et al., (1995) and Bryant et.al (1998) also included considerable attention to cognitive restructuring. Tarrier, Pilgrim and Sommerfield (1999) observed that cognitive restructuring is effective in reducing PTSD symptoms. Foa and associates (Foa & Kozak 1986; Foa & Rothbaum, 1998) explained the phenomenon as the consequence of poor emotional processing of the event.The goals of trauma treatment should include helping poorly defended clients develop more adequate coping strategies (*e.g.*, relaxation training, stress reduction exercises, cognitive modulation of affect through self-talk) prior to asking them to re-experience the trauma in sessions. Strategies from dialectical behavior therapy (Linehan et al., 1999) such as problem-solving, behavior change and emotional regulation can also be implemented to assist in affect regulation and improving relationship skills.

A trauma victim is required to provide medical attention at the earliest and the psychological setbacks manifested in behaviors like pessimism, depression, anxiety or avoidance of reminding the event are necessary to be handled by counselling. Behavioral interventions designed to encourage the use of existing social supports and discourage social withdrawal and isolation may help to reduce protracted and severe grief reactions. The impact of trauma is far reaching and sequelae are diverse. Future interventions should mirror this diversity and be flexible enough to target the needs of victims presenting with widely varying symptom profiles. Trauma survivor may not be in a position to benefit from traditional psychological interventions that target anxiety and affective symptoms when they have legitimate concerns about safety, shelter or significant financial problems resulting from the traumatic event.

METHODOLOGY

Hypothesis

Trauma affected subjects would score low on eight emotional states viz. anxiety, stress, depression, regression, fatigue, guilt, extraversion and arousal after undergoing intervention.

Sample

The initial sample of the present study was comprised of 44 subjects (both male and female) age ranging from 18 to 40 years. Patients admitted in hospitals/ trauma centres(Apex Hospital, DLW, Varanasi and Apollo Hospital, Mehmoorganj, Varanasi) after facing some automobile accidents, explosions, fires, earthquakes, tornadoes, sexual assaults or other terrifying experiences and undergoing treatment for at least 6 weeks were considered for screening the cases. PTSD Checklist-civilian version(PCL-C) was administered on the total sample (N=74). On the basis of PTSD checklist, 10 trauma affected subjects were screened out in terms of intensity of symptoms.

Measures

1) *PTSD Checklist-Civilian Version (PCL-C) (Weathers et al., 1993)*: The PCL is a standardized self-report rating scale for PTSD comprising 17 items that correspond to the key symptoms of PTSD. Respondents indicate how much they were bothered by a symptom over the past month on a 5-point scale, encircling their responses ranging from "1"not at all to "5" extremely.
2) *Eight State Questionnaire Hindi version (Kapoor & Bhargav,1990)*: Indian adaptation of the scale consisting of 96 items used to assess the dominant mood states of the trauma affected subjects. The eight emotional or mood states covered by the scale are anxiety, stress, depression, regression, fatigue, guilt, extraversion and arousal of the adult. The items are rated on a scale of 4 point response pattern from always to never. The reliability coefficients of the subscales are ranged between 0.88 to 0.96.

Procedure

PTSD Checklist-Civilian Version (PCL-C) was administered on the total sample of seventy four subjects. Ten trauma affected subjects were screened out on the basis of standardized cut off scores. In the 17 items of the PTSD Checklist, response categories **3–5** (*Moderately* or above) as symptomatic and responses **1–2** (below *Moderately*) as non-symptomatic. PTSD checklist used the DSM criteria for a diagnosis *i.e.* Symptomatic response to at least 1 "B" item (Questions 1–5), Symptomatic response to at least 3 "C" items (Questions 6–12), and Symptomatic response to at least 2 "D" items (Questions 13–17).Trauma affected subjects who fulfil the criteria for the BCD categories of items only formed the clinical sample for the study. Eight state questionnaire was administered to assess the mood state of the selected subjects and information feedback was provided. Intervention sessions (psychological debriefing and cognitive restructuring) were planned for the study and the subjects were contacted for their written consent. Each session was continued for 1hour duration. A gap of a week between the sessions was maintained and all sessions for the intervention had been performed. Following six sessions for the intervention were followed.

Session I: The subjects were adjudged about his/her problems and enquiry was done on the basis of the test result. Necessity of information was shared with them along with their expectation from the psychological intervention.

Session II: Eight state questionnaire was administered to assess the mood state of the subject and information feedback was provided. Mindfulness relaxation technique was then provided to the subject till he /she felt comfortable with the training.

Session III: In this step of intervention the subject was encouraged to focalize the number of traumatic experiences or one major trauma which had created stress. After the practice of searching (debriefing), previously trained relaxation technique was practiced.

Session IV: Cognitive restructuring was planned to identify the thoughts influencing disturbing emotion and modifying or replacing the thoughts using logic evidence with those which are accurate.

Session V: Progressive relaxation training was provided and self management of cognitive restructuring was tested. This was a closing session of intervention by summarizing the previous sessions and focalizing upon the tailor made cognitive restructuring and psychological debriefing practice.

Session VI: This session was organized after 3 months on the same subjects to assess the follow up of intervention. The patient was reassessed in terms of Eight State Questionnaire to measure the effectiveness of intervention.

The same group of trauma affected cases was compared in terms of pre and post intervention scores of intensity of symptoms to assess the cost effectiveness of psychological intervention of positivity towards life.

RESULT AND DISCUSSION

Table 1.- Means, SDs and t-values of eight emotional states in terms of two conditions of trauma affected patients (Pre intervention and Post intervention)

Emotional States	*Pre Intervention (N=10)*		*Post Intervention (N=10)*		
	Mean	*SD*	*Mean*	*SD*	*t-test*
Anxiety	28.00	3.59	11.40	5.91	7.591**
Stress	22.80	3.25	14.30	4.16	5.083**
Depression	25.10	4.01	11.40	4.71	6.994**
Regression	24.30	3.09	10.40	4.06	8.611**
Fatigue	23.60	3.83	12.40	4.19	6.231**
Guilt	28.00	3.52	10.70	6.07	7.788**
Extraversion	8.10	2.13	21.00	3.68	9.588**
Arousal	21.20	4.28	12.30	3.02	5.365**

Table represents that trauma affected subjects in their baseline condition (before intervention) has reported significantly high score ($t<0.01$) on seven out of eight dimensions (except extraversion) when compared with post intervention condition in support of the hypothesis. Extraversion a positive temperament however reported significantly low mean scores among trauma patients in their baseline condition than post intervention phase. The obtained result thus substantiating the hypothesis that before intervention subjects have scored high on seven emotional states viz, anxiety, stress, depression, regression, fatigue, guiltand arousal which have gone down after intervention.

An individual's reaction to emotional trauma is complex and difficult to predict. A person's age, past exposure to trauma, social support, culture, family psychiatric history and general emotional functioning are some of the variables related to individual response to trauma (McFarlane & Yehuda, 1996). In addition, the emotional and physical proximity to actual danger, degree of perceived personal control, the length of exposure to trauma, the reaction of others to the trauma, and the source of the trauma (*e.g.*, natural disaster, abuse from parent, abuse from stranger, random personal violence, combat, terrorist act) also thrust an individual's reaction to trauma (McFarlane & de Girolamo, 1996).

The findings of the present study revealed that trauma affected participants are sketched in poor mood patterns as measured by emotional states in comparison to their post intervention assessment phase. Out of eight categories of emotional states measured, they reported high anxiety, stress, depression, regression, fatigue, guilt and arousal. A poor quality of emotional state has also been recorded along with the high emotional states. Thus the patients suffering from traumatic thrust were reported to be worried, easily rattled, tense, emotionally upset, easily angered, high strung and easily annoyed. Anxiety due to trauma may reflect symptoms, such as, night terrors, edginess, irritability, poor concentration and mood swings. These symptoms of trauma are common, but are not exhaustive. Individuals respond to trauma in different ways. The patient feels a lot of pressure, unable to take time off and relax, constantly on the go, feeling hectic, experiencing great strain, unhappy with own performance and experiencing lots of demands.

The findings of the present study registered that trauma patients had high scores on depression. It is a condition of unhappy, disagreeable, pessimistic, in poor spirits and disappointed.Stressful life events play an important role in the etiology of major depression (Kendler et al., 2000; Mazure et al., 2000; Mundt et al., 2000). Depression and trauma have high comorbidity rates, and feelings of despair, malaise and sadness can last longer than a few days or even weeks. When a trauma occurs, post-traumatic stress disorder often occurs. The Department of Veteran Affairs estimates that depression is between three to five times more likely to occur in trauma victims who develop PTSD than in the general population.

Traumatic patients have scored high on regression and scored low after intervention in the present investigation. This narrates that the patients have a feeling of confusion, are less organized, unable to concentrate, and experiencing difficulty in coping and act impulsively.It is a return to an earlier stage of life, or a means of escaping from problems. Findings of the present study indicate that in traumatic patients, fatigue is also present. Fatigue is a feeling of exhaustion, squeezed energy, sluggish, tired, needing rest, weary and below par in performance. Guilt has also been found in trauma patients before intervention. This delineates the patient to be regretful, concerned about own misdeeds, experience difficulties in sleeping, unkind and dissatisfied with self.Guilt is a common response following loss and/or traumatic experiences with significant victimization (*e.g.*, after terrorist acts, war, personal victimization).Following traumatic events, guilt may be a complicated part of traumatic response; it is among the symptoms associated with more pronounced traumatic reactions. Guilt may intensify or complicate trauma and/or grief reactions (Nader et al., 1990; Schwarz and Kowalski, 1992). It also may result in hopelessness, depression and other problems such as self-harm, suicidal feelings, and substance abuse. After traumatic events, guilt may be a part of an ongoing sense of helplessness and/or ineffectiveness. Very often, people who have experienced a traumatic event are particularly troubled by the fact that they were unable to exert control over what was happening (Carlson & Dalenberg, 2000).Patients with traumatic symptoms have also reflected a feeling of arousal,which denotes alertness, keyed up, excited, stimulated and keen with sharp senses.Low score on the dimension of extraversion in the present study indicates that trauma patientsare comparatively less sociable, enthusiastic and outgoing.

Early models of treating trauma, typically involved talking about the traumatic event as a central component of treatment. Retelling the trauma was viewed as curative and necessary. Often the goal was to retrieve traumatic memories and review them in counselling session. However, as noted above, more recent research suggests that while some individuals do experience symptom relief after talking about trauma, others respond with an exacerbation of symptoms (van der Kolk & McFarlane, 1996). In fact, exploring traumatic memories can even be damaging to some clients. A client is at risk for becoming overwhelmed, possibly retraumatized, as a result of treatment when the therapy process accelerates faster than he/she can contain (Rothschild, 2000). As a result, counselors are responsible for managing the intensity of exposure to traumatic materials during the counseling.Early intervention prevents individuals from unnecessarily suffering from distressing and disabling chronic PTSD. Intervening in the acute phase also has the significant advantage of preventing the establishment of entrenchedavoidance responses and the development of secondary problems (*e.g.*, use of drugs and alcohol to manage symptoms, depression and socialwithdrawal). Nonetheless, it is important to remain mindful of the fact that acute stress responses (*e.g.*, hypervigilance, insomnia) are common in the immediate aftermath of trauma (in particular, the first 1–2 weeks following the event).

The findings indicate that various intervention programme and better understanding of coping strategies used by the trauma affected subjects may be useful in developing a behaviour modification. Appropriate intervention programme may train such trauma affected subjects to practice a healthy life pattern may be by cognitive restructuring and psychological debriefing.The term *cognitive restructuring* has been used to describe the schematic change mechanism articulated in cognitive therapy. It refers to a structured, collaborative therapeutic approach in which distressed individuals are taught how to identify, evaluate, andmodify the faulty thoughts, evaluations, and beliefs that are considered responsible for their psychological disturbance (Burns & Beck, 1978; Dobson & Dozois, 2010; Hollon & Dimidjian, 2009).Cognitive restructuring is used as a one of the affective methods of combating PTSD.Present approach of intervention framed in terms of cognitive restructuring provided a positive turn on the overloading of emotional states and the PTSD patients group could start regulating their temperament successfully.

Psychological debriefing represents the most common form of early intervention for recently traumatized people, however there is little evidence supporting its continued use with individuals who experience severe trauma. Majority of studies reviewed by Everly et al. (2000) failed to assess individuals prior to the intervention so post psychological debriefing symptom ratings could reflect enduring pre-debriefing levels of distress. The shattered confidence level of a traumatized patient is needed to be explored at its baseline structure and the strength of positivity may be utilized with psychological debriefing. An individual's recovery from trauma is facilitated with the availability of positive social support and the inclination to use them to share the account of the trauma.Specifically, the intervention included psychoeducation, relaxation training, imaginal and in vivo exposure, and cognitive restructuring, as these are common elements of effective treatments for chronic sequelae of traumatic experiences (Resick & Schnicke, 1993; Rothbaum et al., 2000). Present investigation used the technique of psychological debriefing in the third session of intervention and when enquired in the follow up session (VI session), participants reported that those experiences traced, as traumatic at the beginning of the session had lost their distortions threat. A conclusion thus is drawn that trauma stress must be surfaced by the affected person and supported by the practice of cognitive restructuring.

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EFFECT OF ACCEPTANCE AND COMMITMENT THERAPY ON QUALITY OF LIFE OF GENERALIZED ANXIETY DISORDER PATIENTS

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ABSTRACT

While assessment of a mental disorder's impact, the main focus is on three domains: symptoms, functional dysfunction, and quality of life. A unified view of the issue of quality of life in patients with Generalized anxiety disorders can provide important information regarding the nature and degree of the burden associated with disorders and may be useful in the development of strategies to deal with it effectively. So that while doing a research work on assessment of the effect of Acceptance and Commitment Therapy on GAD patients, It has been found that with the symptoms of anxiety and functional dysfunction, quality of life was also deteriorating. Therefore the aim of the current study is to see that if Acceptance & Commitment Therapy has its effect on improvement of Quality of Life as a generalization effect in GAD patients. To investigate this 20 GAD Patients were randomly selected, who were seeking treatment of acceptance and commitment therapy. To assess the level of severity of Generalized Anxiety Disorder GAD 7 and for measuring the level of quality of life, WHOQOL-BREF has been administered during pre-treatment and post-treatment of ACT. In result it was found that as the symptom severity of Generalized Anxiety Disorder was reduces in the same time the level of quality of life of the individuals with Generalized Anxiety Disorder was improved through Acceptance and Commitment Therapy. So in conclusion it can say that Acceptance and Commitment Therapy Improves quality of life also apart from decreasing the level of severity of anxiety.

Key words: Anxiety, Generalized Anxiety Disorder, Social Phobia, Panic Disorder, Quality of Life, Depression.

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Interest in the assessment of quality of life in the anxiety disorders is growing. The present study examined quality of life impairments in individuals with Generalized Anxiety Disorder (GAD), Social Phobia, and Panic Disorder. Results showed that individuals with these disorders reported less satisfaction with their quality of life than non-anxious adults in the community. However, the degree of quality of life impairment is similar across these three disorders. Additionally, comorbid depression, but not anxiety, was found to negatively impact quality of life in these individuals. Finally, diagnostic symptom severity was not found to influence quality of life, indicating that subjective measures of quality of life offer unique information on the effects of anxiety disorders.

Now a days there are a growing interest in the research to assess quality of life in many psychological disorders. Attention is shifting away from a sole focus on symptom severity to include the more liberal impact of psychological disorders on individual's lives, especially individuals' perceptions of their quality of life (Katschnig, Freeman & Sartorius, 1997). The purpose for including quality of life assessments in evaluations of both the influence of psychological disorders and their treatment is widely recognized (Bourland , Stanley, Synder, Novy, Beck, Averill & Swan 2000; Frisch, 1994; Katschnig, 1997; National Institute of Mental Health, 1998). Many types of research have been done on different disorders and their relation or impact on Quality of life of an individual. Now in the present study, the focus is mainly on the assessment of the effect of Generalized anxiety disorder on individuals Quality of life and does the psychotherapeutic effect of Acceptance and commitment Therapy also improves the quality of life of the individual. There were multiple randomized trials of ACT, which included exposure exercises and mindfulness based skills, showing that it is a useful treatment for a variety of disorders including mixed anxiety groups, which included OCD (Arch et al., 2012), social anxiety disorder, (Craske, Niles, Burklund, Wolitzky-Taylor, Vilardaga, Arch & Lieberman, 2014).

Generalized anxiety disorder (GAD) is characterized by the presence of excessive, permanent, and uncontrollable worrying related to multiple aspects of life, with muscular tension and autonomic hyperactivity (Tanja, Zetsche & Margraf, 2007). Patients with GAD present a distortion in their perception of risks and threats, particularly those concerning health, safety, and wellbeing of them as individuals of close family members (Allgulander, 2012). The most frequent components of concerns according to the specialized literature are: family and interpersonal relationships, work, school, finances, and health (Jurado, Gutierrez-Ariza, Ruiz-Veguilla, 2008). GAD is mostly found in people who are separated, as well as in subjects who are unemployed or of a low socio-economic level (Jurado et al 2008).

GAD has a significant negative impact on the daily life of patients, and on their functionality, (Ruiz, Zamorano, Garcia-Campay, Pardo, 2011) which links it to quality of life. The opinion of quality of life can be considered as happiness or wellbeing. There are several definitions of quality of life, but the general unanimity among researchers is that it refers to subjective wellbeing; a construct which is based on individual's standards to determine what a good life is (País-Ribeiro 2004). As such, quality of life is an overall assessment that the subject makes of their life, and it depends both on the characteristics of the subject (demographics, personality, values, etc) as it does on external modulators, such as illness and any treatment required (Lara-Muñoz, Ponce & Fuente, 1995). The most useful assessments of quality of life should include, or at least differentiate between, subjective and objective estimations (Potter, Cantarer, Wood, 2012). There are some discripancy in the operational definition of quality of life (Bourland et al., 2000; Gill & Feinstein, 1994), few researchers choosing to assess quality of life in relation to functional impairment (Lochner, Mogotsi, Toit, Kamine Niehaus & Stein, 2003) and others measuring individuals' subjective perception of their lives (Coles, Heimberg, & Safren, 2005). However, the general consensus is that the focus should be on the subjective experience of quality of life rather than objective factors; since objective factors do not capture the importance an individual places on various life domains (Frisch, 1994; Mendlowicz & Stein, 2000). Measuring quality of life in terms of functional dysfunction provides little more than a health status rating (Gill & Feinstein, 1994). Quality of life is set apart from other indicators of mental health precisely because it takes into account an individual's perception of their own well being, rather than solely relying on an objective assessment. Subjective measures of quality of life offer a rich alternative to traditional mental health assessments by allowing individuals to express their own insights and values regarding their lives.

Previous researches has demonstrated that there are some links between GAD and increased health care utilization (Blazer, Hughes & George, 1991), role difficulty such as being divorced or separated, higher rates of unemployment, and self-reported interference with daily activities (Wittchen, Zha, Kessler & Eaton 1994) and lower levels of emotional health and social functioning (Massion et al., 1993). In addition, the results of various studies suggest that the degree of dysfunction experienced by individuals with GAD is similar to that experienced by persons with major depressive disorder (Hunt et al., 2004; Kessler et al., 1999; Stein and Heimberg, 2004; Wittchen, 2002; Wittchen et al., 2000) and panic disorder (Hunt et al., 2004; Massion et al., 1993).

A growing body of literature have been examined the impact of GAD in its literal form. Primary care patients with GAD reported reduced physical and social functioning, increased physical role/occupational limitations and emotional problems, as well as reduced energy levels and general perceptions of health when compared to individuals who don't have any disorder (Schonfeld, Verboncoeur, Fifer, Lipschutz, Lubeck & Buesching, 1997). Very less attention has been given in the area that Generalized Anxiety Disorder affects one's quality of life. The quality of life is typically conceptualized as an individual's subjective sense of satisfaction with individuals own life (Mendlowicz and Stein, 2000). GAD is associated with lower likelihood of satisfaction in family life, in one's sense of overall well-being, and in one's present main activity, reported by Stein and Heimberg (2004).

There are very few researches done focusing on comparing quality of life dysfunctions among the generalised anxiety disorders. A recent meta-analysis (Olatunji, Cisler 2014) strove to compile the current research and quantify the differences in quality of life between the major anxiety disorders. While the authors found that there were no significant differences in overall quality of life dysfunction, patients with PTSD, GAD, panic disorder, and mixed anxiety diagnoses reported particularly low quality of life in the mental health domain. Conversely, patients with social phobia were not significantly impaired in the areas of work and physical health. Due to the nature of meta-analysis, however; this study included both functional and subjective measures of quality of life, making comparisons across studies problematic as these two constructs are meaningfully dissimilar. Though the information taken through the study can be illuminating, it is also important to look at the results of individual studies. (Lochner, Mogotsi, Toit, Kaminer, Niehaus & Stein, 2003) conducted a study comparing quality of life in OCD, social phobia, and panic disorder and found a similar degree of overall dysfunction across groups, with differences emerging in several domains. The OCD sample had poorer quality of life in the areas of family and activities of daily living, while the social phobia sample was more impaired in social and leisure areas. Patients with panic disorder reported dysfunction in leisure activities and difficulty refraining from the use of non prescribed medications. Although this study used the same quality of life measures for all participants, the measures assessed functional dysfunction and not subjective perception of quality of life. As stated previously, a sole focus on functioning may omit pertinent information regarding the domains valued by each individual. Through all this literature review it was found that researches on quality of life with generalised anxiety disorder patients were very few. In India also there is no study done on the effect of acceptance and commitment therapy with quality of life in individuals with GAD. Now the goal of this study was to examine the level of quality of life in individuals with Generalized Anxiety Disorder (GAD) and is Acceptance and Commitment therapy helps in improvement of quality of life during psychotherapeutic management of GAD.

METHOD

Sample

20 patients who were having motivation to involve in psychotherapeutic management with Acceptance and Commitment Therapy were got selected from

my previous research sample. In which both male and female participants were included.

Measures

All participants received a semi-structured interview for Anxiety disorders including the Clinician Severity Ratings for Generalized anxiety disorder through GAD 7 given by Spitzer and Williams, 2006. It is 7 Items anxiety scale (GAD-7) is having good reliability (.92), as well as criterion, construct, factorial, and procedural validity (alpha 0.89). A cut point was identified that optimized sensitivity (89%) and specificity (82%). Increasing scores on the scale were strongly associated with multiple domains of functional impairment . The scores are assigned of 0, 1, 2, and 3, to the response categories of "not at all," "several days," "more than half the days," and "nearly every day," respectively. GAD-7 total score for the seven items ranges from 0 to 21. The cut-off of 5, 10 and 15 represents the level of severity.

Participants also completed one self-report measure for the Quality of Life assessment through WHOQOL-BREF. The WHOQOL-BREF instrument comprises 26 items, which measure the following broad domains: physical health, psychological health, social relationships, and environment. The WHOQOL-BREF is a shorter version of the original WHOQOL with 100 items. To provide a broad and comprehensive assessment, one item from each of the 24 facets contained in the WHOQOL-100 has been included. In addition, two items from the Overall quality of Life and General Health facet have been included.

Procedure

The current study is the part of my previous study in which the effect of ACT was seen in GAD patients and it was compare with CBT. Now in current study as the aim was made to see that does acceptance and commitment therapy improves Quality of Life as a generalization effect of GAD patients. After selecting 20 Patients of GAD in which equal amount of male and female patients were included. All participants provided informed consent. Prior to being included in the treatment protocol, a brief description of the procedure of therapy was given to all participants. After taking the baseline assessment including level of severity of GAD and level of quality of life of the patients with GAD, Psychotherapeutic sessions were started. 12 to 13 weekly sessions of Acceptance and Commitment therapy was given to every patient. The duration of the sessions was 45 minutes to 1 hour. Post assesent was done after completing the therapy sessions. Statistical analysis was done with SPSS.

Statistical Analysis: Both descriptive and inferential statistics was used. Mean and percentage was used to describe sociodemographic data. For comparison of pre and post test groups on various measures, non parametric test was chosen, keeping in mind the sample characteristics. As the sample size is 20 only, therefore Wilcoxon signed rank test was applied.

RESULT AND DISCUSSION

The aim of this study was to assess the level of quality of life in the individuals with generalized Anxiety Disorder and to see the effect of Acceptance and commitment Therapy on Generalized Anxiety Disorder and The Quality of life in the four major areas of quality of life that are Physical Health, Psychology health, Social Relation and Environment.

So, will start discussing with the socio-demographic variables. The data is homogeneous as there were no significant difference has been found between socio-demographic variables. It has been shown in Table No. 1.

Table No. 1. Mean of Socio-demographic variables

		Age	*Gender*	*Education*	*Marital_status*	*Background*
N	Valid	20	20	20	20	20
	Missing	0	0	0	0	0
Mean		35.7000	1.5000	1.9500	.7500	2.0500
Std. Deviation		8.61516	.51299	.75915	.44426	.75915

Table 2: Comparison of pre and post test scores on GAD.

GAD	*N*	*Median*	*Z- value*	*p-value*
Pre-treatment	20	16.0	3.93	0.0001
Post-treatment	20	9.0		

Table 2 shows that there is significant difference between pre and post test median scores on GAD (z= 3.93, p= 0.0001) which indicates that there was significant decrease in anxiety levels from pre test (median= 16.0) to post test (median- 9.0) by ACT. One of the main findings of this study is that degree of quality of life impairment is similar across GAD.

Table 3: Comparison of pre and post test scores on Quality of Life domains.

	Group	*N*	*Median*	*Z score*	*P value*
QOL Psychological -health	Pre-Treatment	20	9.0	3.92	0.0001
	Post-Treatment	20	20.0		
QOL Physical-health	Pre-Treatment	20	17.5	3.64	0.0001
	Post-Treatment	20	26.0		
QOL Social Relation	Pre-Treatment	20	7.0	2.21	0.03
	Post-Treatment	20	9.5		
QOL Environment	Pre-Treatment	20	15.5	3.92	0.0001
	Post-Treatment	20	27.0		
QOL Total	Pre-Treatment	20	48.5	3.92	0.0001
	Post-Treatment	20	83.0		

We can see that table 3 shows that there is significant difference between pre and post test median scores on QOL-PSY (z= 3.92, p= 0.0001), QOL-PHY (z= 3.64, p= 0.0001), QOL-SR (z= 2.21, p= 0.03) and QOL-ENV (z= 3.92, p= 0.0001) which indicates that there was significant increase in Psychological, Physical, Social Relation and Environment dimension of quality of life from pre test (median= 17.5) to post test (median= 26.0) by ACT that was clear with the QOL Total median score that was (z= 3.92, p=0.0001).

This study examined the effect of Acceptance and Commitment Therapy in improvement of quality of life in a sample of treatment-seeking individuals with primary diagnoses of Generalized Anxiety Disorder. Through the result findings of pre and post assessments, it can say that there are significant enhancement of Quality of life has been found during the treatment of Individuals with the improvement in anxiety features of GAD patients. In a study the result showed that consecutive cases who presented with Generalized anxiety disorders were treated with ACT and participants showed clinically significant pre-treatment to post treatment changes in severity of anxiety symptoms. This case series has experimental and clinical implications done by (Mohsen et al., 2015).

Another investigation facilitate our findings of comparative study that was carried out on GAD in the Mexican population, to see the effect of GAD on quality of life of the person and result showed that with increasing the severity of anxiety the level of Quality of life were decreasing because as can be noted, it is a condition that causes disability and poor quality of life. (MariaDel et al., 2015). There are studies done to see the relationship between quality of life and anxiety disorders and it is very much expected that with psychological disorders the quality of life of a person could also deteriorated. (Michael, Twohig, Jonathan, Abramowitz, Elen, Laura, Ryan, Kate, Morrison & Brooke, 2015) Previous research given some link between GAD and increased health care utilization (Blazer, Hughes & George, 1991), role impairments such as being divorced or separated, higher rates of unemployment, and self-reported interference with daily activities and lower levels of emotional health, role functioning, and social functioning (Wittchen et al., 1994).

Stein and Heimberg 2004 reported that GAD is associated with lower likelihood of satisfaction in family life, in one's sense of overall well-being, and in one's present main activity, even after controlling for the presence of comorbid major depressive disorder. Nevertheless, most studies of impairment have not distinguished between GAD in its pure form and GAD with comorbid diagnoses. Persons with generalized anxiety disorder were more often unmarried or divorced. A significantly higher proportion of persons with generalized anxiety disorder than without had received disability benefits during their lifetimes. Even when employed, individuals with generalized anxiety disorder showed indirect evidence of impairment. Generalized anxiety disorder was associated with a reduction in overall emotional health also that is directely linked with the quality of people's life (Massion, Warshaw & Keller 2013). So there are number of studies done to see the relation, association effect of psychological disorder and quality of life in a clustered way.

We have specifically reviewed relationship of quality of Life with GAD. But the area that was very untouched was the role of The specific type of psychotherapeutic effect also improves quality of life. Therefore this study has been planed have planed because of non-availability of previous researches on this topic, the findings were could not be corroborated with other studies but there are evidences has been found in few studies that Acceptance and Commitment Therapy improves the quality of life as well as reducing the level of anxiety.

CONCLUSION

In conclusion now it can say that it is very well seen that Acceptance and Commitment therapy is a very efficacious approach in the treatment of Generalized Anxiety Disorder and its effect also shows in the significant improvement in all the dimensions of Quality of life of an individual.

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A Comparative Study of Level of Aggression and Family Environment Between Day Worker and Night Worker

Shreya Chaudhary and S.K. Srivastava***

ABSTRACT

Present research was done to compare the level of aggression and family environment between day worker and night worker. For this a total sample of 60 workers was selected, divided into two groups, 30 day workers and 30 night workers. The age group varied from 19-24 years. The study was conducted at Haridwar District of Uttarakhand. For the data collection Aggression scale, Family Environment Scale was used. Data was analyzed using "t test. The quota sampling technique has been used for selection of the subjects.The analysis of data of aggression level revealed that there is significant difference between day worker and night worker. The statistical analysis revealed that all the eight family environment factors, viz. cohesion, Expressiveness, conflict, acceptance and caring, independence, active-recreational orientation, organization and control together showed significant difference between day worker and night worker.

Key words-Aggression, Family Environment, Day Workers, Night Workers

It is popularly said that man is an aggressive animal. Man is the only species on this earth that kills members of his own species consistently and ruthlessly. Aggression is a behaviour aimed at causing physical or psychological pain to any living being. It may be of direct or indirect type. Direct aggression again may be physical or verbal. Physical aggression includes hitting, punching, pushing,

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slapping, kicking etc. On the other hand, verbal aggression means abuse, spreading of rumor, malign etc. Any aggressive behavior that is carried out via another person is considered as indirect aggression.The most extreme form of aggression is the destruction of mankind through wars. Considered from this perspective, aggression may be regarded as the essential part of human nature.

Dollard et al. (1939) defined aggression as anysequence of behavior directed towards a person to commit intentional injury. The term aggression is a mode of frustration (Chauhan & Tiwari 1972). Bandura (1973) argues that aggression is a complex event and it involves injurious intent as well as social judgments. An injury must be judged as injurious acts from the viewpoints of social judgment.

Aggression has been defined (Loeber& Hay, 1997) as 'a category of behaviour that causes orthreatens physical harm to others.'Aggression refers to behavior between members of the same species that is intended to cause humiliation, pain, or harm, antisocial behavior, depression, anxiety, dissociation, and other traumarelated symptoms as well as problems in emotion regulation. (Singer,Anglin, Song. Lunghofer 1999). Geen (2001) has defined aggression as a noxious stimulus by one organism to another with intent to harm.

Three elements emerge from this definition. These are: (1) the delivery of unpleasant excitations, (2) with the intention to harm and (3) independently of the success or failure of the undertaking. These definitions of aggression reveal certain essential properties. First, aggression is an interpersonal behaviour. It represents a social nature. It is accompany by certain emotions and attitudes towards a target person or group. Secondly, aggression involves intent to cause harm directly or indirectly to the target person. Thirdly, aggression is a threat to the violation of social norm. It is directed towards safeguarding the basic righ of the weaker persons or groups or victims from stronger one.

The family is the oldest and the most important of all the institutions tha man has devised to regulate and integrate his behavior as he strives to satisfy his basic needs.The family is a social institution and is the most fundamental of al social groups and it is universal in its distribution from time immemorial.The family is basically a unit in which parents and children live together. It is fundamenta and persistent social group. The family had been viewed as a source of morality and decent content. It has also been identifies as a primary force for controlling behavior and civilizing the human animal. Its key position rests on its multiple functions in relation to overall development of its members their protection. This is influenced by the environment in which they are living.

A family is a primary group which requires "people who are intimate and have frequent face-to-face contact with one another, have norms (that is expectations regarding how members in the group should behave) in common and share mutually enduring and extensive influences. Thus, family members a members of a primary group have extreme influence upon each other. The second concept in the definition of family involves "obligations to each other." Obligations concern mutual commitment and responsibility for other members in the family system. The third concept in the definition entails "common residences." That is, to some extent, family members live together.

Family Environment refer to the kind of conditions which prevail in family and which influence the all round development of the individual which works as a basis for whole life. It includes all sorts of moral and ethical values and emotional, social and intellectual climate set up by family members to contribute to the wholesome development. Family Environment is a complex of social and cultural, conditions, the combinations of extrinsic physical conditions that effect and influence the growth and development of members of family, the most instinctive fundamental social unit which includes parents and children.

Family plays a key role in the healthy development of an individual's personality. The presence of a positive family environment is aprerequisite for the healthy growth and development of the membersfrom a given family unit. In addition, a positive family environmentensures appropriate fulfillment to the needs and demands of the familymembers.The family environment possesses a certain consistency so that the impact of same basic values, individuals, material objects etc is felt over and over. Paternal influence may not be felt in a specific situation, but the attitudes and ideas expressed day after day inevitably leave their mark.

The family environment is influenced by a number of factors like the nature of family constellation; no of children in the family, marital relationship between husband and wife, maternal (paternal) employment; and socio economic and religious background of the family. Family environment continues to be of crucial importance throughout adolescence and young

Andreuet al. (1998) found that American men resorted to physical aggression more readily than Japanese or Spanish men. But Japanese men preferred direct verbal conflict to their American and Spanish counterparts. Bowdle et al. (1996) showed that Southern. American were found to become more aroused and to respond more aggressively than. Northern Americans when affronted with each other. Gender is another important factor that is responsiblefor human aggression Coie and Dodge (1997) showed that males more aggressive than females. Maccoby andJaklin (1974) have reported similar findings.

Women who reported moderate to severe menstrual symptoms were more aggressive across their cycles than women who reported minimal symptoms (Dougherty et al. 1998). Women with borderline personality disorder demonstrated more aggressive responses than did women without the disorder (Dougherty et al. 1999).Keenan & Shaw (1997) examined the relationship between Family structure and aggressive behavior in children, findings indicated that boys were more aggressive. However, girls in mother-alone families had rates of aggression similar to boys in mother-father Families. Children in mother-alone households were 2-3 times more likely to be ranked in the top third percentile for exhibiting aggressive behavior when rated by teachers.

Barry and Fleming (1990) reported significantly poor cohesion and expressiveness, and more conflict in addicts' present families than did either non-alcoholic with a family history of alcoholism or non–alcoholics with no family history of alcoholism. Filstead et al. (1981) found that alcoholic families perceive a higher level of conflict and less cohesive family environment.

Research regarding level of family conflict suggests that a conflictual family environment is associated with adolescents' insecurity and psychological distress, as well as aggressive behavior and conduct disorder (Wissink et al. 2006). Ahmed & Haque (2007) conducted study on aggression in adolescent boys and girls of tribal (*i.e.* Chakma) and non-tribal (*i.e.* Bengali) students in Chittagong Hill Tracts. Regardless of gender, race and stage of development, tribal respondents were found to express significantly higher rates of aggression than non-tribal respondents. Boys expressed significantly higher rates of aggression than girls, Respondents at early adolescent stage expressed significantly higher rates of aggression than the respondents at late adolescent stage.

Regarding family environment and its relation to insufficient sleep and physical exercise, (Bourdeaudhuij & Oost, 1998) examining general family characteristicssuch as family cohesion and adaptability with numerous health related behaviors(smoking, alcohol use, food choice, sleeping, Body Mass Index and physical activity)found that adolescents in the healthiest clusters reported higher levels of family cohesion. Mishra & Bamba (2012) studied the impact of family environment on academic achievement of a child. School performance of secondary school children has been found to have significant and positive relationship with children's perception of overall family environment and its four dimensions viz. Achievement orientation, Cognitive stimulation, Recreational Orientation and Home structure.Stress and anxiety are the offshoots ofinadequate interaction with the environmentand family environment is the chief cause (Joshi & Tomar, 2006).

Deepshikha & Bhanot (2011) studied family environment of adolescent girls and its impact on their socio-emotional adjustment and revealed that all the eight family environment factors, viz. cohesion, expressiveness conflict, acceptance and caring, independence, active-recreational orientation, organization and control together showed significant role in socio-emotional and educational adjustment of adolescent girls.Poor family environment in terms ofparental hostility, rejection and inconsistenciescan all contribute to psychological problemsviz., anxiety, stress, neuroticism, depressionand many others (Sharma, Verma & Malhotra,2008)

Objective

The objective is to compare the level of aggression and family environment between day worker and night worker.

Hypotheses

The study has been designed to test the following hypotheses:

(i) There would be no significant difference in aggression level of day worker and night worker.

(ii) There would be no significant difference in family environment of day worker and night worker.

(iii) There would be no significant difference in cohesion of day worker and night worker.

(iv) There would be no significant difference in expressiveness of day worker and night worker.

(v) There would be no significant difference in conflicts of day worker and night worker.

(vi) There would be no significant difference in acceptance and caring of day worker and night worker.

(vii) There would be no significant difference in active-recreational orientation of day worker and night worker.

(viii) There would be no significant difference in independence of day worker and night worker.

(ix) There would beno significant difference in organization of day worker and night worker.

(x) There would be no significant difference in control of day worker and night worker.

METHOD

Sample

The sample of the study has two groups. Group I consist of 30 day workers in the age range of 19-24 years. Group II consist of 30 night workers who were matched with group I in terms of sex, age, education and socio economic status. Quota sampling and ex post facto has been used.

Materials used

The following tools were used in the present investigation:

- Aggression scale
- Family Environment Scale
- Aggression scale

This test is developed and standardized by KM Roma Pal and Mrs. Tasneem Naqvi. The test consists of 30 Items and five alternatives. The reliability coefficient of the test was found 0.82. All the statements of this scale werematter of behaviour in daily life. All the items were scored to yield aggression measure.It is appropriate for use on age group of 14-24 years.

Family Environment Scale

FES scale (Bhatia and Chadha 1993) consists of three dimensions which are mentioned below:

1. Relationship dimension (cohesion, expressiveness, conflict acceptance and caring)
2. Personal growth dimension (independence, active recreational orientation)
3. System maintenance dimension (organization, control)

It is appropriate for use on age group 17-50 years. The tool has a fairly high validity and reliability.

Procedure

The researcher will use questionnaire to collect relevant data from the subjects. The questionnaire will be given to fill up the answers honestly and after completing, the questionnaire will be collected from the subjects.

RESULT AND DISCUSSION

In this study, an attempt has been made to compare the level of aggression and family environment between day worker and night worker in which day worker and night worker are taken as independent variables and family environment are taken as dependent Variables. Null hypothesis has been formed. Quota sampling technique has been used for selection of the subjects.

It has been interpreted from table 1, that there is significant difference in aggression level between day workers and night workers. It may be because working at night inevitably causes sleep deprivation and fatigue. Sleep loss makes one irritable, anxious and stressed. It makes night worker exhausted and tends to make his aggression level high as comparative with night worker. There exists significant difference in family environment of day worker and night worker. The research showed night working can affect personal relationships and people who regularly work night shifts miss out on family activities, spending quality time with children, spouses etc, and seeing friends.

Table 1: Mean Comparison of level of aggression and family environment between day worker and night worker

VARIABLES	*MEAN*		*SD*	*t*	*df*	*Level of significance*
	Day Workers	*Night Workers*				
Aggresion	80.6	66.83	22.56	2.44	58	0.05
Family Environment	200.15	154.35	35.2	5.20	58	0.01
Cohesion	50.7	46	8.67	2.17	58	0.05
Expressiveness	38.6	34.15	8	2.22	58	0.05
Conflicts	32	39.8	12.38	3.12	58	0.01
Acceptance and Caring	50.9	45.70	9.50	2.19	58	0.05
Active-recreational Orientation	31.9	27.8	4..46	3.69	58	0.01
Independence	35.3	32.3	6.07	1.65	58	NS
Organization	8.17	7.2	1.64	2.36	58	0.05
Control	13	12	3.56	1.12	58	NS

The significant difference in cohesion of day worker and night worker also exist. The reason of low level of cohesion in family environment of night worker is that they spent the time from night to morning out from the home, remain busy with their office works and it is that time period when children are free from their school, tuitions and other activities and spouse free from their job or household schedule as well as other family members also get spare time at such hours but due to circumstances night worker have no other option except to spent those family hours in an office. It causes lack of feeling of unity, cohesiveness in environment of family.There is significant difference in expressiveness of day worker and night worker. It may be because day workers remain at home during that time when other members of family are also free and spent quality time with family. This makes them able to freely express their feelings but night workers spent that time outside the home and it brings distance in their relationship and cause low expressiveness as compared to day workers.

There also exists significant difference in conflicts of day worker and night worker. Sleep loss makes one irritable, anxious and stressed. It makes night worker exhausted.Night working and the need to rest in between may feel deprived and isolated, leading to moodiness and negativity. All this further leads to conflicts in their family.It means there is significant difference in acceptance and caring of day worker and night worker. It may be because night workers suffer from additional stress caused by missing out an important part of their social life, their family. It is harder for night workers to spend time with their children and to attend their school functions with them. Spouse may work the opposite shift, thus causing less time together. Whereas day workers enjoy and spent time with family and thus gives more care to their family.

There is significant difference in active-recreational orientation of day worker and night worker. Social and family factors can have a big impact on a shift worker's mental and physical health. Workers who don't have sufficient time to interact with their families and friends it affect their relationship and thus have low level of active-recreational orientation comparative to day workers.There is no significant difference in independence of day worker and night worker. It is because workers night working and day working do not affect the freedom independence of their family environment.

There is significant difference in organization between day worker and night worker. The day workers are more organized as compared to night workers as night workers because of loss of sleep feels aggressive, exhausted. There is no significant difference in control of day worker and night worker. It is because working shift do not affect the control being in family.

CONCLUSION

The analysis of data of aggression level reveals that working at night results in increasing aggression level of worker as loss of sleep makes individual exhausted irritated, stressed, fatigued, and violent as comparative to day workers. The analysis of data reveals that the working at night not only affects physical health but its impact can also be seen in family environment of night workers. As compared with family environment of day worker, there is high level of conflicts, can be seen in family of night worker whereas low level of acceptance and caring, expressiveness, active recreational orientation can be seen in family of night worker when compared with family environment of day worker. The family environment of day worker seems better than night workers.

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ASSESSMENT OF NATURE OF TRAUMATIC STRESS AMONG KASHMIRI PEOPLE LIVING IN LOW AND HIGH RISK CONDITIONS

Touseef Rizvi and S. Reshma Jamal***

ABSTRACT

There are certain traumatic stresses, which are experienced by individuals in various conditions or situations. An individual experiences traumatic stress as a reaction to certain life condition. Some of the traumatic stress like violent crimes, death of a close one and atrocities are not flexible in nature, for once they have been experienced, they become an part of the individual's behavior repertoire, and these do not easily disappear or change into some other forms. The present investigators developed an inventory for assessing nature of Traumatic Stress among Kashmiri people. Significant differences were found between the percentages of Kashmiri people living in high and low risk conditions on certain traumatic stressors such as threat of firing, fear of crackdown and searching operations, anger, hostility and aggressive behavior of administration,, threat to life, unexpected death of close family member during encounter, disintegration / breaking of the family, and sexual assault and rape. Significant difference were observed between males and females living in high risk conditions only on disintegration / breaking of the family. However, significantly higher percentage of Males living in low-risk conditions reported anger, hostility and aggressive behavior of administration, bomb blast near one's house, threat of life, survived by chance, torture of a family member in the prison, detention in jail of a close family member, dissociation from family members and detention in jail of oneself, as compared to females.

Keywords: Traumatic Stress, Kashmiri people, Aggressive behavior, Psychological wellness

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The concept of Traumatic stress is difficult to define. It can be considered as those stressful events and circumstances that are both extreme and outside the realm of everyday experiences. Stressors are be conceptualized on a continuum ranging from minor or everyday stressors to major stressors. Extreme stressors are those events and circumstances that, because of their objective nature, place massive demands on an individual's abilities to maintain psychological wellness, behavioral and cognitive functioning and physical integrity (American Psychiatric Association, 1987, 1994). Norris (1990) referred to traumatic stress as the population of events involving "violent encounters with nature, technology or human kind".

Trauma is an inexorable part of human existence, especially in a conflict situation (Sedlock & Hustod, 1996). This fact assumes even greater importance in the light of the fact that trauma could play a key role in the genesis of various psychiatric problems (Margoob et al., 2006). Traumatic stress encompasses exposure to events or the witnessing of events that are extreme and life threatening (Kolk & Weisaeth, 1996). The total lifetime prevalence for any traumatic experience in the community in Kashmir is reported to be 58.69% (Margoob et al., 2004).

Individuals are unlikely to be confronted with traumatic stress on any given day. However, occurrence of traumatic stressors, such a,s violent crime (sexual assault and physical assault), being held captive (arrest), killing of civilians are frequent sources of traumatic stress in Jammu and Kashmir. In addition to being direct victims of these events, emergency service workers such as, fire fighters, and emergency medical teams are repeatedly exposed to accidents, killings, bomb blasts, grenade attacks, mine blasts, suicide squads. Individuals who are exposed to such type of traumatic events witness the horrible realities and live with the memories that accompany and follow these events.

In the last two decades, Kashmir has witnessed multiple conflicts leading to increase in various psychiatric disorders (Margoob, 1995). During this period there has been persistent violence and trauma situation, resulting in deaths of thousands of people and its aftermath effects like family instability, relocation of people and property damage (De Jong et al., 2008). The wrath that occurred due to natural disasters (snowstorm and earthquakes) during the same time cannot be underestimated (Margoob et al., 2006). The various co morbid psychiatric disorders associated with PTSD include major depressive disorders, anxiety disorders and somatization (Kessler et al., 1995)

Victims of traumatic stress live in specific surroundings or situations, belong to specifying societies. Specific circumstances in Kashmir determine the intensity and severity of the consequences of extreme life events such as terrorism and violence. The occurrence of the traumatic events occurs due to diverse situations such as political repression and military atrocities which create intense feelings of alienation, hopelessness and despair among people of Kashmir.

In Kashmir, victimization leads to traumatic events and ruptures in the lives of people of Kashmir. The time, duration, extent, and meaning of trauma for its victims and survivors, and the coping strategies they have used to adapt to it all depends upon the degree of victimization and rupture, the disorganization and severity of the choice of interventions. Tracing the history of multiple traumas along the time direction at different stages of development reveals that in the case of traumatized people of Kashmir, time does not heal but rather magnifies the response to further trauma. Thus, the present investigators feel that there is a need to examine the nature and prevalence of traumatic experiences of the people of Kashmir exposed to high and low risk conditions.

The main research objectives of the present study are:

1. To develop traumatic stress inventory.
2. To assess differences in prevalence of traumatic stressors in Kashmiri individuals living in high and low risk conditions .
3. To assess gender differences in prevalence of traumatic stressors in Kashmiri individuals living in high risk conditions.
4. To assess gender differences in prevalence of traumatic stressors in Kashmiri individuals living in low risk conditions.

METHOD

Sample

The sample for the present study consisted of 240 Kashmiri individuals. Of these, 100 individuals belonging to the high- risk conditions were drawn from Kupwara and Budgam and the remaining 140 individuals were hailing from the low- risk condition or place *i.e.* Srinagar. The sub- samples from the different areas was taken in order to identify how high and low risk conditions differently influenced the perception of traumatic stress. The sample was further split in terms of gender (*i.e.* males = 125; and females = 115).

Tool

Traumatic Stress Inventory (TSI) was developed by the authors by applying item analysis. Quantitative analysis was used to develop Traumatic Stress Inventory, which includes the measurement of item difficulty and item discrimination.

Item Difficulty: For most testing purposes, the difficulty of an item is defined in terms of the proportion (or percentage) of individuals who answer it correctly. The easier the item, the larger this percentage or proportion will be. Here the items are arranged in order of difficulty, so that test takers begin with relatively easy items to proceed to items of increasing difficulty. This arrangement gives the test takers confidence in approaching the test and also reduces the likelihood of their wasting much time on items beyond their ability to the neglect of easier items they can correctly complete.

Item Discrimination: It refers to the degree to which an item differentiates correctly among the test takers in the behavior that the test is designed to measure. For the Traumatic Stress Inventory (TSI), response was recorded as 'Yes' or 'No'. The measurement of item discrimination usually involves a dichotomous variable (the item) and a continuous variable (the criterion).

A common practice in item analysis is to compare the proportion of cases that pass an item in contrasting criterion groups. The two extreme groups such as lower 27 % and upper 73% were identified. The numbers of subjects endorsing each item in U and L criterion groups are expressed in proportions; the differences between these two proportions provide an index of discrimination. Any item whose reached or exceeded 17 were selected. The criterion set for the item selection was at the 0.5 and 0.01 levels of significance. Thus, all the 30 items were retained. The split- half reliability for the TSI was found to be 0.92.

Procedure

The data were collected individually from the subjects through face- to- face interview method. Prior to data collection, the investigator established rapport with the subjects. Each subject was assured that his/ her responses will be kept strictly confidential and will be used for research purpose only.

Data Analysis: The data analyzed by means of certain appropriate statistical tests such as item analysis and critical ratio of percentages. Item analysis method was used to develop the tool, namely, Traumatic Stress Inventory (TSI). Data were converted into percentage to analyze. It helped in understanding what percent of the sample face a particular category of traumatic stress. Critical Ratio was used to examine the differences between percentages in comparison groups on traumatic stress.

RESULTS AND DISCUSSION

The sample was initially dichotomized into two groups, *i.e.* individuals living in High Risk Conditions and the percentage of respondents endorsing the experience/occurrence of each type of stressor were computed. Further, gender comparisons were also made between individuals residing in high risk/ low risk conditions in order to determine whether nature of stressors experienced was influenced by risk conditions and gender.

Table 1: Percentages of Kashmiri individuals living in High Risk Conditions (HRC, N = 100) and Low Risk Conditions (LRC, N = 140) endorsing the experience/occurrence of the traumatic stressors.

Sr.No.	*Items*	*Subjects*	
		HRC (%)	*LRC (%)*
1.	Threat of firing	29.00	67.14
2.	Fear of crackdown or searching operations	30.00	60.71
3.	Panic	60.00	50.71
4.	Threat of war / violence	54.00	67.14
5.	Anger, hostility and aggressive behavior of Administration	63.00	45.00
6.	Bomb blast near my house	42.00	52.14
7.	Death of a close family member	39.00	42.85
8.	Threat of life	50.00	34.28
9.	Survived by chance	40.00	40.71
10.	Survived by freak circumstances	41.00	38.57
11.	Financial losses	37.00	40.00
12.	Tension caused by resistance and ignoring the warning to cooperate / to obey	33.00	38.57
13.	Migration to safer places and displacement	28.00	28.57
14.	Troublesome neighbors	23.00	29.28
15.	Major personal illness or injury	27.00	25.00
16.	Self or family members become unemployed	28.00	22.85
17.	Enforced change of residence	23.00	21.40
18.	Robbery or theft in the house	18.00	23.57
19.	Torture of a family member in the prison	20.00	21.42
20.	Seeing death of military *Jawans*	19.00	21.40
21.	Separation reactions of young children	23.00	17.14
22.	Detention in jail of a close family member	16.00	19.20
23.	Unexpected death of a close family member during encounter	26.00	13.57
24.	Disintegration / breaking of the family	32.00	15.00
25.	Dissociation from the family member	17.00	15.71
26.	Robbery of expensive valuables during Search operations	16.00	17.14
27.	Demands after abduction of a family member	18.00	12.85
28.	Abduction	12.00	10.70
29.	Detention in jail of oneself	6.00	2.14
30.	Sexual assault and rape	0.00	3.57

Table 2: Percentages of Males Living in High Risk conditions (MLHRC, N = 68) and Females Living in High Risk Conditions (FLHRC, N = 32) endorsing the experience/occurrence of the traumatic stressors.

Sr.No.	*Items*	*Subjects*	
		MLHRC (%)	*FLHRC (%)*
1.	Threat of firing	73.52	75.00
2.	Fear of crackdown or searching operations	73.52	78.12
3.	Panic	60.29	59.37
4.	Threat of war / violence	51.47	59.37
5.	Anger, hostility and aggressive behavior of Administration	58.82	71.87
6.	Bomb blast near my house	39.70	46.87
7.	Death of a close family member	38.23	40.62
8.	Threat of life	47.05	56.25
9.	Survived by chance	45.58	28.12
10.	Survived by freak circumstances	42.64	37.50
11.	Financial losses	41.17	28.12
12.	Tension caused by resistance and ignoring the warning to cooperate / to obey	38.23	21.87
13.	Migration to safer places and displacement	23.52	37.50
14.	Troublesome neighbors	20.58	28.12
15.	Major personal illness or injury	23.52	34.37
16.	Self or family members become unemployed	27.94	28.12
17.	Enforced change of residence	22.05	25.00
18.	Robbery or theft in the house	19.11	15.62
19.	Torture of a family member in the prison	23.52	12.50
20.	Seeing death of military *Jawans*	16.17	25.00
21.	Separation reactions of young children	23.52	21.87
22.	Detention in jail of a close family member	14.70	18.75
23.	Unexpected death of a close family member during encounter	23.52	31.25
24.	Disintegration / breaking of the family	19.11	59.35
25.	Dissociation from the family member	16.17	18.75
26.	Robbery of expensive valuables during Search operations	19.11	6.25
27.	Demands after abduction of a family member	17.64	18.75
28.	Abduction	10.29	15.62
29.	Detention in jail of oneself	7.35	3.12
30.	Sexual assault and rape	0.00	0.00

Table 3: Percentages of Males Living in Low Risk conditions (MLLRC, N = 57) and Females Living in Low Risk Conditions (FLLRC, N = 83) endorsing the experience/occurrence of the traumatic stressors.

Sr.No.	*Items*	*Subjects*	
		MLLRC (%)	*FLLRC (%)*
01.	Threat of firing	71.92	63.85
02.	Fear of crackdown or searching operations	59.64	61.44
03.	Panic	57.89	45.78
04.	Threat of war / violence	56.14	51.80
05.	Anger, hostility and aggressive behavior of Administration	59.64	34.93
06.	Bomb blast near my house	63.15	44.57
07.	Death of a close family member	36.84	46.98
08.	Threat of life	49.12	24.09
09.	Survived by chance	52.63	32.53
10.	Survived by freak circumstances	42.10	36.14
11.	Financial losses	45.60	36.14
12.	Tension caused by resistance and ignoring The warning to cooperate / to obey	42.10	36.14
13.	Migration to safer places and displacement	36.84	22.89
14.	Troublesome neighbors	29.82	28.91
15.	Major personal illness or injury	31.57	21.68
16.	Self or family members become unemployed	26.31	20.48
17.	Enforced change of residence	28.07	16.86
18.	Robbery or theft in the house	28.07	20.48
19.	Torture of a family member in the prison	31.51	14.45
20.	Seeing death of military *Jawans*	28.07	16.86
21.	Separation reactions of young children	24.56	12.04
22.	Detention in jail of a close family member	28.07	13.24
23.	Unexpected death of a close family member during encounter	17.54	10.84
24.	Disintegration / breaking of the family	17.54	13.25
25.	Dissociation from the family member	24.56	9.63
26.	Robbery of expensive valuables during Search operations	22.80	13.25
27.	Demands after abduction of a family member	10.52	14.45
28.	Abduction	19.29	10.84
29.	Detention in jail of oneself	5.26	0.00
30.	Sexual assault and rape	5.26	2.40

Highest endorsement was found for anticipatory and perceived stressors such as threat of firing(low risk condition) and anger, hostility and aggressive behavior of administration (high risk conditions). Significant differences were found between the percentages of Kashmiri people living in high and low risk conditions on certain traumatic stressors such as threat of firing (CR = 5.85, $p < .01$), fear of crackdown and searching operations (CR = 4.71, $p < .01$), anger, hostility and aggressive behavior of administration (CR = 2.76, $p < .01$), threat to life (CR = 2.45, $p < .05$), unexpected death of close family member during encounter (CR = 2.44, $p < .05$), disintegration / breaking of the family (CR = 3.14, $p < .01$), and sexual assault and rape (CR = 27.46, $p < .01$). Significant differences were not found between the Kashmiri people living in high and low risk conditions on the remaining items measuring traumatic stress.

There was no significance of difference between males and female subjects belonging to high- risk conditions on traumatic stressors. That is, males and females perceived the similar amount of traumatic stress. Significant difference existed between the comparison groups only on disintegration / breaking of the family (CR = 4.06, $p < .01$).

Males living in low- risk conditions scored significantly higher percentages than the females living in low- risk conditions on the following traumatic stressors like anger, hostility and aggressive behavior of administration, bomb blast near my house, threat of life, survived by chance, torture of a family member in the prison, detention in jail of a close family member, dissociation from family members and detention in jail of oneself. On the remaining traumatic stressors, significant differences were not found to exist.

The findings of the present study suggest that the main reason of traumatic stress in the case of Kashmiri individuals may be that there is the threat of significant resource loss. That is, stress occurs when there is actual resource loss. A common set of traumatic stressors is perceived by the people within Kashmiri culture. For traumatic stressors in Kashmiri individuals, the occurrence of loss could have special meaning because traumatic losses are most clearly linked to survival.

CONCLUSION

The present study was conducted to explore traumatic stress among people of Kashmir living in high and low risk conditions. Traumatic stressors have been identified to know what type of traumatic stress the people of Kashmir perceived or experienced. The present research will be helpful to researchers to understand or to get an insight regarding the subfields of stress, *i.e.* traumatic stress. The research will provide basis for identifying the traumatic stress among people exposed to high risk and also help people to adopt healthy coping styles. Also, the research will provide a blue print of Kashmiri people's lifestyles.

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ROLE OF SELF EFFICACY AND LOCUS OF CONTROL IN ADHERENCE TO MEDICAL REGIME AMONG ARTHRITIS PATIENTS

Kadambari and Deepti Hooda***

ABSTRACT

Arthritis is one of those non-communicable chronic diseases that have increased in frequency and severity because of globalization, industrialization, lifestyle such as lack of physical activity, unhealthy eating and hectic working pattern. Being a lifestyle disease, taking medicine alone is not the complete cure to arthritis; it requires introducing various changes in one's lifestyle such as adopting healthy diet and exercise regularly. Arthritis treatment focuses not only on medication but also on diet, exercise and other alternative therapies for relieving symptoms, managing pain, improving joint function and quality of life. The present investigation was conducted to study the role of Self Efficacy and Locus of Control in Adherence to Medical Regime in a sample of 100 patients with Arthritis in age range 40-60 years (Mean age= 51.92 years). Subjects were assessed using self reporting questionnaires/scales of Self Efficacy and Locus of Control specifically designed for chronic diseases; and Adherence to Medical Regime. The obtained data was analyzed using Correlation and regression analyses. Results indicate that Self Efficacy and Locus of control are not only significantly associated with various components of Adherence to Medical Regime but are also significant predictors of Adherence to Medical Regime in patients with arthritis.

Keywords: Self Efficacy, Locus of Control, Adherence to Medical Regime, Arthritis.

In today's world, non-communicable chronic lifestyle diseases are the leading cause of death and disability. Chronic diseases and conditions, such as

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heart disease, stroke, cancer, type 2 diabetes, obesity, and arthritis are among the most common health problems and cause of disabilities and death. Disability due to musculoskeletal disorders has increased by 45% from 1990 to 2010. Of these, Osteoarthritis is the fastest increasing major health condition (GBD, 2010). Arthritis is the most common cause of disability (Hootman, Brault, Helmick, Theis, and Armour, 2009). Arthritis means inflammation of a joint. Arthritis include bony swelling, crepitus, restricted movement, deformity of joint, muscle weakness and muscle wasting. Though, arthritis can occur in any joint in the body but more commonly found in knee, hand joints and spinal apophyseal joints. There are two major types of arthritis – Osteoarthritis (OA), which is the "wear and tear" arthritis, and rheumatoid arthritis (RA), an inflammatory type of arthritis that happens when the body's immune system does not work properly. RA is an autoimmune disease where the synovial membrane becomes inflamed, become thick and stiff. It is also attacked by white blood cells, which can damage or kill tissue in the joint. In Osteoarthritis, cartilage begins to break down and wear away. It is no longer able to cushion the contact of bones with each other. One bone rubs directly on the other bone. Factors such as genetics, age, sex, obesity, occupational knee bending and brisk physical labor are responsible for more prevalence of Arthritis in India. It is found to be the fourth most frequent cause of health problems in women across the world and the eighth in men. It is a disease of joints which usually begins after the age of 40 and progresses slowly. More than 50% of the people above age 70 years are affected by Arthritis. (Arthritis Foundation, 2005).As it is a chronic disease, lifelong management of the disease becomes a matter of concern. The lifelong management of Arthritis requires a person to adhere completely to the prescribed medical regime.

The term "Adherence" has replaced the term "Compliance", which better reflects a more active role of patients in consenting and following prescribed treatment (Lutfey & Wishner 1999). WHO (2003) defines adherence as "the extent to which a person's behavior-taking medication, following a diet, and /or executing lifestyle changes, corresponds with agreed recommendations from health care provider." The term "*Adherence to Medical Regime*" means the extent to which a person's behavior/actions (in terms of medication, following diets, or executing lifestyle changes) matches with the medical or health advice of the health practitioners. Medical regime for Arthritis usually includes adherence to diet, medicine and exercise specific for Arthritis condition to control the rate of progression. Various factors influence person's adherence to medical regime such as demographic variables (Karamanidou, Clatworthy, Weinman & Horne, 2008), socioeconomic status(Simoni 2002) and psychological factors such as social support(Karamanidou et al., 2008), self efficacy (Pells et al. 2008;Focht et al. 2005) and locus of control (Cherepakho, 2008; Helmer, Krämer and Mikolajczyk, 2012).The present study focuses on role of Self Efficacy and Locus of Control in Adherence to Medical Regime in patients with arthritis.

Self Efficacy is a construct from Bandura's Social Cognitive learning theory. Bandura (1995) stated that it "refers to beliefs in one's capabilities to organize and execute the courses of action required to manage prospective situations". Self-efficacy is what an individual believes he or she can accomplish using his or her skills under certain circumstances (Snyder & Lopez, 2007). According to Van der Bijl & Shortridge-Baggett (2002), individuals are more likely to engage in activities for which they have high self-efficacy and less likely to indulge in those for which they do not have high self efficacy. Self efficacy of a person can be cultivated and altered through performance outcomes in a situation, vicarious experiences, verbally pursuing an individual and physiological feedback. Self efficacy plays role in every area of life whether it is academics, sports or health. It is domain specific and a person may have high self efficacy for one domain while low for other. For instance, a person may have high self efficacy for exercising while low for medication intake. Health self efficacy refers to beliefs in people about whether they are capable enough to take actions necessary for maintaining their heath condition. Pells, Shelby, Keefe, Dixon, Blumenthal and Lacaille (2008); Focht, Rejeski , Ambrosius, Katula and Messier (2005) emphasized the role of health self efficacy in arthritis and reported that Osteoarthritis patients who reported high self efficacy enjoyed greater physical functioning as compared to those low on this dimension. Lorig & Gonzalez (1992) also emphasized the importance of Self Efficacy in health management and developed Lorig's Arthritis Self Management Program.

Another factor found to be correlated with Adherence to Medical Regime is Locus of Control. The concept of Locus of Control was introduced by Rotter (1954). He defined Locus of Control (LOC) as people's general, cross situational beliefs about what determines whether or not they get reinforced in life. Thus the source of reinforcement can lie within the individual or outside him leading to categorization of individuals as people with 'Internal Locus of Control' and people with External 'Locus of Control' respectively. A person with an Internal Locus of Control believes that the outcome of a situation is within their own personal control while a person with External Locus of Control believes more in outside forces for controlling their behavior. Wallston, Wallston, and DeVellis (1978) applied Rotter's construct of Locus of Control to the field of health and gave the concept of 'Health Locus of Control'. Health Locus of Control (HLC) is the degree to which individuals believe that their health is controlled by internal or external factors. The role of Health Locus of Control was found evident in studies of Cherepakho (2008), who stated that a strong belief in powerful others was found to be related to performance of fewer health behaviors, reflecting the belief in the ability of the medical professional to cure illness and protect health which further negatively affect health care service utilization of those individuals. Berglund, Lytsy and Westerling (2014) found a positive association between

Internal Health Locus of Control and self-rated health, and negative associations between Chance and Powerful others beliefs with self-rated health.

Objective

The present investigation was conducted to study the role of Self Efficacy and Locus of Control in Adherence to Medical Regime among arthritis patients.

METHOD

Sample

A purposive sample of 100 adults (aged 40-60 years with mean age 51.92 years) with Arthritis was selected. The patients with Arthritis were diagnosed by a medical practitioner with a minimum duration of two years and maximum of ten years. All of the patients were literate at least up to 12th standard. While patients with extreme or secondary complications, co-morbid conditions and acute disease during past one month were excluded from the study.

Tools

Following tools were used in the present study.

1) ***Multidimensional Health Locus of Control Scale (MHLC form c).*** MHLC scale was designed by Wallston, Stein, and Smith (1994).The MHLC (form c) was specially made for people with chronic disease. Form C is designed to be "condition specific" where the word condition can be replaced by name of chronic disease such as Diabetes, Arthritis etc. It assesses person's beliefs regarding where control over his/her health lies. This form has 18 items assessing whether an individual is channelized by Internal Locus of Control, Chance Locus of Control, Doctor Locus of Control or Other People Locus of Control. Each statement is to be rated on a 6 point scale which ranges from strongly disagree (1) to strongly agree (6). The alpha-reliabilities of the sub-scales are adequate for research purposes. The data from Form C subscales are moderately stable over time and posses considerable concurrent, construct and discriminant validity.
2) ***Chronic Disease Self Efficacy Scales:*** Chronic Disease Self Efficacy Scales were developed by Stanford Patient Education Centre (1996) to study self management in people with chronic disease. The scale consists of 10 subscales *i.e.* Exercise Regularly; Get Information About Disease; Obtain Help from Community, Family, Friends; Communicate With Physician; Manage Disease in General; Do Chores; Social/Recreational Activities; Manage Symptoms; Manage Shortness of Breath and Control/Manage Depression. The score for each item is the number circled. If two consecutive numbers are circled, the lower number (less self-efficacy) is taken. If the numbers are not consecutive the item is not scored. The score for each scale is the mean of the

items. For scales of 1-2 items, the scale is not scored if any item is missing; for scales with 3-4 items, the scale is not scored if more than 1 item is missing; for scales with 5-6 items the scale is not scored if more than 2 items are missing. Higher score indicates higher self-efficacy. Nearly all the scales possess good internal consistency and test retest reliability.

3) ***Adherence to Medical Regime:*** Adherence to medical regime was assessed using 3 scales:

a) *Medical Adherence Rating Scale (MARS)*: MARS was designed by Thompson, Kulkarni, and Sergejew (2000). It consists of 10 items with yes or no response format. The Medication Adherence Rating Scale (MARS) is a questionnaire that tests a patient's compliance with medication. Patients who respond "NO" to questions 1-6 and 9-10; and "YES"; to questions 7-8 are fully compliant. It has a good internal consistency (Cronbach á = 0.73) and reliability (Pearson's r = 0.76; p < 0.05).The scale possesses sound psychometric properties.

b) *Adherence to Diet Checklist*: It consists of four questions that assess about level of adherence to prescribed diet of patient. The items require patient to answer in Yes or No format.

c) *Adherence to Exercise Checklist*: It consists of four questions regarding adherence to exercise regime where the subject has to respond in Yes/No.

Procedure

A purposive sample of 100 patients with arthritis who met the inclusive criteria for study was selected. All the patients were selected from Rohtak (Haryana) using non random sampling method. Various government and private hospitals were contacted to get the sample. The sample consisted of 100(23 males and 77 females) patients with arthritis in age group 40-60 years. After ensuring that the subjects have understood the instructions given to them, all the subjects were assessed on tools of Locus of Control and Self Efficacy specially designed for people with chronic disease. Then after it was verified that respondents have answered all the questions in the given set of questionnaires and responses were scored as per scoring system. Finally data was analyzed using correlation and regression statistical techniques and discussed in the results and discussion section.

RESULTS AND DISCUSSION

The present perusal was conducted to explore the role of Locus of Control and Self Efficacy in Adherence to Medical Regime in patients with arthritis. The sample consisted of 100 patients with Osteoarthritis in age range 40-60 years with mean age 51.92 years. The results obtained using correlation and regressio analyses are shown in the tables below.

Table 1: Coefficients of Correlation between Self Efficacy and Adherence to Medical Regime in patients with Arthritis.

	Adherence to Medical Regime		
Chronic Disease Self Efficacy Scales	***Adherence to Medicine***	***Adherence to Diet***	***Adherence to Exercise***
Exercise regularly	.002	-.172	.598**
Get Information About Disease	.007	-.052	.234*
Obtain Help from Community, Family, Friends	.249*	.316**	.068
Communicate with Physician	-.069	.135	-.061
Manage Disease in General	.028	-.159	.265**
Do Chores	.096	-.141	.124
Social/ Recreational Activities	.038	-.103	.175
Manage Symptoms	-.046	-.155	.141
Manage Shortness of Breath	.043	-.111	.177
Control /Manage Depression	.142	.028	.081

From Table 1, it is clear that 'Exercise Regularly', a component of Chroni Disease Self Efficacy has a significant and positive correlation with Adherenc to Exercise Regime ($r=.598, p< .01$), which implies that Arthritis patients scorin high on Self Efficacy -Exercise Regularly are more efficient in adhering to th exercise regime. Thus, a patient who is confident enough that he/she can d exercise such as gentle exercises(for muscle strength and flexibility)and aerobi exercises without making symptoms of his chronic condition worse is more likel to exercise regularly. The results are in line with a study conducted by Holma & Lorig, (1992) where patients with rheumatoid arthritis were motivated to engag in regular physical exercise by enhancing their perceived efficacy in a sel management program. Exercise Regularly showed a non- significant correlatio with Adherence to Diet and Adherence to Medicine.

Another significant positive correlation was found between 'Get Informatio about Disease', component of Chronic Disease Self Efficacy and Adherence t Exercise Regime ($r=.234, p<.05$). Patients with arthritis, who are more awar and ready to get information about disease from community resources, are mor likely to adhere to exercise regime. Whereas, Get Information About Disease wa non-significantly correlated with Adherence to Diet and Adherence to Medicin The third sub-scale of Chronic Disease Self Efficacy, 'Obtain Help fro Community, Family, Friends' scale was found to be significantly and positivel correlated with Adherence to Medicine and Adherence to Diet ($r= .249, p<.0$ $r=.316,p<.01$) while non-significant coefficient of correlation was obtained wi

Adherence to Exercise. Patients scoring high on Obtain Help from Community, Family, Friends feel confident enough to seek help not only in their day to day activities or household chores like shopping, cooking, meals, medicines, personal hygiene but also for emotional support from Community, Family and Friends. Such people are more likely to adhere to their diet and medicine component of their medical regime.

Significant correlation was found between 'Manage Disease in General' Scale and Adherence to Exercise Regime (r=.265,p<.01) but non-significant correlations were obtained with Adherence to Diet and Adherence to Medicine. This points that patients with Arthritis, who score high on Chronic Disease Self Efficacy to Manage their Disease in General are more likely to adhere to the exercise regime. Manage Disease in General involves the confidence to do different tasks and activities to manage chronic condition, easily recognizing the need to see a doctor and trying to adhere to the prescribed regime by doctor. Such patients who are highly confident in doing things necessary to manage their chronic condition on regular basis are more likely to regularly adhere to their exercise regime. Thus, a patient who possesses high Self Efficacy to Exercise Regularly, Get Information about the Disease and thinks himself capable enough to manage the disease is more likely to adhere to exercise regime. Patients with high efficiency to Obtain Help from Community, Family, Friends are more likely to Adhere to Diet and Medicine component of medical regime. No significant correlations were obtained between Communication with Physician, Do Chores, Social/Recreational Scale, Manage Symptoms, Manage Shortness of Breath and Control/Manage Depression correlation and any of the Adherence to Medical Regime components.

Table 2: Coefficients of Correlation between Locus of Control and Adherence to Medical Regime in patients with Arthritis

	Adherence to Medical Regime		
Chronic Disease Self Efficacy Scales	***Adherence to Medicine***	***Adherence to Diet***	***Adherence to Exercise***
Internal Locus of Control	.594**	.436**	-.107
Chance Locus of Control	-.257**	-.151	-.021
Doctor Locus of Control	.397*	.578**	-.024
Other People Locus of Control	.028	.175	-.123

Table 2 clearly depicts that Internal Locus of Control, was found to be significantly and positively correlated to Adherence to Diet and Adherence to Medicine(r=.436, p<.01; r=.594,p<.01) This means that osteoarthritis patients scoring high on Internal Locus of Control reported high level of adherence to diet and medicine. Thus, patients who are internally oriented, take self responsibility for their diseased condition is more likely to follow and adhere to their prescribed diet and medicine. Also Internal Locus of Control was found to be non-significantly and negatively correlated with Adherence to Exercise. A significant and negative correlation was found between Chance Locus of Control and Adherence to Medicine($r=-.257$, $p<.01$) indicating that people with arthritis whose Health Locus of Control was Chance or Luck were less likely to take medicine. Patients with Chance Locus of Control believe that their condition will remain the same despite of their every effort to manage it and whether it improves or worsens, is a matter of luck only. Negative correlations were also obtained between Chance Locus of Control and Adherence to Diet and Adherence to Exercise but were found non- significant. Doctor Locus of Control was found to be significantly and positively correlated with Adherence to Diet and Medicine ($r=.578$, $p<.01$;$r=.397$,$p<.05$ respectively). Thus, Osteoarthritis patients with high Locus of Control on doctor for maintaining their diseased condition also scored high on Adherence to Diet and Medicine. Whereas, non-significant and negative correlation was obtained between Doctor Locus of Control and Adherence to Exercise. Other People Locus of Control was not found to be significantly correlated with any of the components of the Adherence to Medical Regime, whether it was Adherence to Medicine or Adherence to Diet or Adherence to Exercise.

Correlation is a successful statistical technique to know about the associations that exist between variables but it does not give any idea about the predictive power of associated variables. Thus, in order to examine the extent to which weighted combinations of various variables included in the study predict Adherence to Medical Regime, stepwise multiple regression was applied to the obtained data. In the present study there were 14 predictor variables (Chronic Disease Self Efficacy Scales and types of Health Locus of Control) and 3 criterion variables (Adherence to Medicine, Adherence to Diet and Adherence to Exercise). Multiple Regression was applied on all the three criterion variables and obtained results are discussed in tables presented below.

Table 3: Predictors of Adherence to Medicine in patients with Arthritis.

Predictors	*Multiple R*	*R Square*	*R Square Change*	*B*	*F*	*P*
Internal Locus of Control	.59	.35	.35	.171	53.322	.000

Results of regression analysis on Adherence to Medicine revealed that only one predictor variable out of 14 met the criteria. 'Internal Locus of Control' was found to be the only significant predictor of Adherence to Medicine with multiple R equal to .59 and R Square .35 ($F=53.322$, $p<.01$). This indicates that Internal Locus of Control accounted for 35% of variance in Adherence to Medication. The regression coefficient B point out that the direction of influence of predictor was positive. Thus, patients who feel that they are responsible for their arthritic condition and believe that their own behavior improves or worsens their arthritic condition are more likely to adhere to their prescribed medicine.

Table- 4. Predictors of Adherence to Diet in patients with Arthritis.

Predictors	*Multiple R*	*R Square*	*R Square Change*	*B*	*F*	*P*
Doctor Locus of Control	.58	.33	.33	.119	49.088	.00
Communication With Physician	.60	.36	.03	.019	27.914	.00
Internal Locus of Control	.64	.39	.03	.012	22.204	.00

The regression equation was computed to estimate the extent of variance in Adherence to Diet. 'Doctor Locus of Control' was found as the most significant predictor, Chronic Disease Self Efficacy for 'Communication with Physician' stood as the second significant predictor which was followed by 'Internal Locus of Control'. Doctor Locus of Control with multiple R equal to .58 and R Square .33(F=49.088, p<.01) accounted for 33% of variance which is a remarkable contribution. Communication with Physician with multiple R equal to .60 and R Square change equal to .03(F=27.914, p<.01).Thus alone accounted for 3% of variance in criterion variable. The third significant predictor was Internal Locus of Control with multiple R equal to .64 and R Square change equal to .03(F=22.204,P<.01).Thus alone accounting for 3% of variance in Adherence to Diet Regime. It is clear from the table 4, that the regression coefficients B for all the predictors pointed in a direction of positive change. This suggests that osteoarthritis patient with high Doctor and Internal Locus of Control and who also feel confident in communicating with Physician are more likely to adhere to prescribed diet by the health practitioners.

Table 5: Predictors of Adherence to Exercise in patients with arthritis.

Predictors	*Multiple R*	*R Square*	*R Square Change*	*B*	*F*	*P*
Exercise Regularly	.60	.36	.36	.085	54.615	.000
Manage Symptoms	.66	.43	.02	.031	24.546	.000

Out of 14 predictor variables, only two meet the criteria *i.e.* 'Exercise Regularly' and 'Manage Symptoms' (Scales of Chronic Disease Self Efficacy). Exercise Regularly and Manage Symptoms were found as significant predictors of Adherence to Exercise Regime in patients with osteoarthritis. Exercise Regularly accounted for maximum variance in the criterion variable with multiple R equal to .60 and R Square as .36(F=54.615, p<.01) resulting in approximately 36% variance in positive direction (B=.085) followed by individual contribution of 2% variance by Manage Symptoms which had a multiple R equal to .66 and R Square change of .02. (F= 24.546, p<.01).The regression coefficient B for manage symptoms was positive indicating positive direction of influence. Thus, Adherence to Exercise Regime in patients with arthritis is significantly predicted by two components of Chronic Disease Self Efficacy *i.e.* Exercise Regularly and Manage Symptoms. Therefore, it can be inferred that patients with arthritis who feel confident in doing exercise regularly, managing their emotional distress and doing different tasks and activities needed to manage health condition adhere to exercise regime more.

CONCLUSION

A good management of chronic condition such as arthritis can only be achieved by consistent adherence to its medical regime. Based on the results of the study, it can be concluded that different domains of Chronic Disease related Self Efficacy and Health Locus of control significantly predict one or the other component of Adherence to Medical Regime. Thus, this study provides evidence that Health/Disease related Self Efficacy and Health related Locus of Control may be useful constructs to be included in pre –treatment assessment of patients while considering their medical regime. And may also help in developing intervention programs with a aim to enhance health related Self Efficacy and Locus of Control in order to encourage and motivate patients to adhere to medical regime.

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PROBLEM SOLVING AS A KEY COMPETENCY FOR EFFECTIVE JOB PERFORMANCE OF HEALTH PROFESSIONALS: AN EXPLORATORY STUDY

Shubhakar Gajula and Beena Chintalapuri***

ABSTRACT

This is an exploratory study aimed to identify the behavioural traits for the competency of problem solving and to study the relationship between the identified traits and job performance. A sample of 37 Health professionals (employees in the Clinical Informatics position) responded to Harrison Assessments Work Preferences. Of the 175 Harrison Assessments' traits, 40 traits showed a relationship with job performance ratings given by the supervisors. Ten of the 40 traits showed a significant linear correlation with job performance scores. The overall Suitability Score generated for Sales Representatives had a 0.616 correlation with actual job performance of Clinical Informatics Specialists. This methodology has helped the given organization in bringing about in simpler yet profound manner an operational standard which can be applied in selection and development of Clinical Informatics Specialists particularly on competency of Problem Solving.

Keywords: Problem Solving, Job Performance, Health Professionals

Information technology has an astounding application in industries. Medical field has adapted the latest trends for wider benefit. Use of technology in diagnosis, surgery and other related fields has taken medical industry to greater heights in the last 20 years. Information related to diagnosis, surgery and other and medical data of patients has been used effectively to help patients. One of the significant advancement that IT has provided to hospitals is the development of electronic medical records (EMR). This technology can convert medical information into a single database. Technology allows healthcare providers to access pertinent patient information such as medical history, medications, insurance information, etc with just the click of a mouse.

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Informatics (informatics comes from the French word informatique which means computer science). Informatics is defined as computer science + information science. Used in conjunction with the name of a discipline, it denotes an application of computer science and information science to the management and processing of data, information, and knowledge in the named discipline.

Worldwide use of computer technology in medicine began in the early 1950s with the rise of the computers. In 1949, Gustav Wagner established the first professional organization for health informatics in Germany. Health informatics also called Health Information Systems is a discipline at the intersection of information science, computer science, and health care. It concerns with the resources, devices, and methods required for optimizing the acquisition, storage, retrieval, and use of information in health and biomedicine.

Specialized university departments and Informatics training programs began during the 1960s in France, Germany, Belgium and The Netherlands. Medical informatics research units began to appear during the 1970s in Poland and in the U.S. Health informatics tools include computers, clinical guidelines, formal medical terminologies, and information and communication systems. It is applied to the areas of nursing, clinical care, dentistry, pharmacy, public health, occupational therapy, and (bio) medical research.

In the view of above, it is noted that the role of clinical informatics specialist becomes critical to use the combined data for benefit of patients. This field of study is often pursued by healthcare professionals with a passion for technology. According to the U.S. Bureau of Labor Statistics, the demand for applicants with both medical and technological knowledge is growing. Job growth in clinical informatics could reach about 21% through 2020. The American Health Information Management Association (AHIMA) estimates mid-range salaries for those in clinical informatics roles to reach more than $85,000 a year. Managers in this profession may earn as much as $200,000. However, it is important to note that geographical location, position requirements, the employer and other factors may affect those numbers, so research is necessary.

Healthcare professionals with passion for technology are usually inducted as clinical informatics specialists. It is therefore assumed that the eligibility factors to become clinical informatics specialist are same as that of healthcare professionals with an addition of technology passion. However, it needs to be understood that behavioural suitability for the position is different and rarely explored for this position. In any industry, the performance is dependent on both job eligibility and job suitability levels; it is generally observed that a technically sound person with low behavioural suitability might have low performance on the job. Clinical informatics position is no exception to this, hence there is a need.

The field of clinical informatics is emerging and there is a need to understand the behavioural competencies required for this field. The American Medical Informatics Association (AMIA) mentions Analyze problems and Produce solutions as part of core competencies list for those who want to work in the field of medical informatics. The current study explores "Problem solving" as one of the competencies, and explores to identify the behavioural traits required for effective 'problem solving' as Clinical Informatics Specialist.

Problem-solving is a skill with many facets, including remaining objective, engaging creativity, and calling on the right open-minded people for support. It is essential for a clinical informatics specialist to analyse the problem statements and understand the opportunities for improvement while using technology. It is important to quickly understand technology capabilities and limitations for the healthcare industry in order to bring maximum benefit to both patients and hospitals.

For the present study, the researcher has used Harrison Assessments Benchmarking Technology to identify the behavioural traits for the competency of problem solving and to study the relationship between the identified traits and job performance. Harrison benchmarking technology is a software program that utilizes a proprietary algorithm to identify the suitability traits measured by the Harrison Suitability Assessment that demonstrate a relationship with the overall performance score. It also identifies the relative importance of the trait relationships. The 175 traits considered in the analysis included a full range of suitability factors related to personality, attitudes, motivations, interpersonal skills, task preferences, interests, and work environment preferences.

Harrison Assessments Benchmarking Technology generates a Job Success Formula (JSF) which formulates the traits related to success. The traits are formulated by awarding either positive or negative points to different levels of the traits based on the relative importance of each trait to performance and how each level of each trait impacts performance.

The traits are categorized as Essential traits, Desirable traits and Traits to avoid or Negative Traits. Essential traits demonstrate a linear relationship with performance. Desirable traits and traits to avoid, demonstrate a nonlinear relationship with performance.

The Job Success Formula (JSF) is used to calculate an overall suitability score based on the trait scores of individuals and how closely their responses align with the Job Success Formula (JSF). The overall suitability score is a percentage based on the sum of the points earned by the individual divided by the number of points possible in the Job Success Formula (JSF). The overall suitability score is then interpreted in the following manner:

90-100	Expected to be an excellent performer
80-89	Expected to be a good performer
75-79	Expected to be an average performer
70-74	Expected to be a below average performer
69 or below	Expected to be a poor performer

Objective

- To identify the personality traits that would best fit for the competency of Problem solving through Harrisons Suitability Assessment
- To measure the relationship between Harrison Suitability Assessment's behavioural traits and overall Job performance score on 'Problem Solving' competency.
- To arrive at Job Success Formula (JSF) template as a tool/product to be used by the organization under study

METHOD

Sample

The sample consisted of 37 employees in the job position of clinical informatics specialist. Entire sample is a homogeneous with similar responsibilities. Individuals of the sample had an average tenure of 5 and a half year as sales representatives. Out of the 37 employees more than 40% o them had a work experience of more than 9 years in the same position. Other demographic details of the sample are not disclosed inorder to maintain confidentiality.

Tool

The following two tools were used:

Harrison Assessments Suitability Questionnaire: The test has been constructed by Dan Harrison, founder and CEO of Harrison Assessments International Limited. The Harrison Assessments Suitability Questionnaire is an online test and measures 175 suitability traits, 30-40 of which apply to any job function. The test has statements arranged in 18 frames and could be completed in approximately 30 minutes. The first 16 frames have 8 statements in each frame and the respondent has to arrange the statements as per their priority or experience. The 17th frame is related to capture the interest and the 18th frame has 8 statements to be value-arrange.

Harrison Assessments has Job Success Formulas that relate to more than 650 job titles, each of which offer up to four levels of experience and three levels of management. Since, eligibility and suitability are different for each job level and each management level, the assessment factors are adjusted in each case making a total of over 6500 Job Success Formulas. The Job Success Formulas are based on 20 years of performance research and thus accurately reflect the behavioural requirements and scoring. The suitability formulas can be easily customized according to the specific behavioural requirements of the job. The norms are developed based data of more than 3,00,000 respondents across various countries. The norms are used diligently keeping in view and culture and country for interpretation. Job Success Formula templates gives three set of trait list:

a. Essential Traits: These are traits in which higher scores generally relate better performance.

b. Desirable Traits: These are traits in which low scores hinder success but there is not necessarily a significant overall correlation with performance. In other words, poor performers have a higher incidence of low scores on this type of trait.

c. Traits to Avoid: These are traits that hinder success but don't necessarily have a negative correlation with success

Job Performance rating on the Problem Solving Competency: Each employee of the sample group was rated on 5 competencies (Problem Solving, Process Analysis & Design, Change Management, Project Management and Effective Communication) that were considered essential for the position of clinical informatics. The rating was given by their supervisor according to the perceived presence of the competency in the individual. However, for the current study, the performance scores of Problem Solving were taking into consideration.

The organization was asked to provide an integer from 60 to 100 when creating an overall performance rating for each employee. This was to bring about uniformity in rating and for psychological analysis. Instructions with regard to possible bias against individuals who had been in the job for a shorter or longer period of time was made clear to the performance rater. The final ratings were then determined and mutually agreed upon by the organization and Harrison Assessments to be used for analysis.Performance scoring format is given to Table 1 for the sake of clarity.

Table 1. Performance evaluation scale for clinical informatics department

Score	*Category*
100	Ideal
90	Excellent
80	Good
75	Average
70	Below Average
60	Poor

Procedure

The study is conducted by Harrison Assessments in four phases a. These phases are described below and the entire process was done in a span of approximately 3 months.

Pre-assessment Phase: was to identify the scope, viability and adequacy of data & information to be collected. To identify possible controlled variables and identify variables beyond control

Data Collection & Review: This phase consisted of

- Collection of documents on job descriptions and Key Performance Indicators
- Collection of information on job performance from the supervisor of the employee in the sample group, in this case Clinical Informatics
- Collection of details of each member of the sample
- Data Cleansing

Harrison Assessments Profiling and Data Input: In ths phase the following processing was undertaken:

- Communication to each member of the sample to respond to the online questionnaire
- Employees who completed the questionnaires are accepted to the analysis of the study (this is determined by the consistency score secured by each individual).
- Categorization of the data as per Harrison Assessments benchmarking methodology
- Key-in Competency rating scores for each member of the sample in the Harrison Assessments system

Analysis and Presentation:

- The data was loaded into Harrison Assessments International's analysis software for further analysis using Automatic Benchmarking technology
- Identify traits that were likely to be associated with competency rating
- Preparation and presentation of each individual's and group profile.

RESULTS AND DISCUSSION

Each member of the sample was assessed through Harrison Assessments Work Preferences Inventory. The data collected on the actual job performance and Harrison Assessments work preferences inventory was analysed quantitatively and qualitatively using both descriptive and inferential statistical for a meaningful interpretation.

Out of the 175 Harrison Assessments' traits, 40 traits showed a relationship with behavioral competency rating. Ten of the 40 traits showed a significant linear correlation with the rating and thus were included as essential traits. The correlations of the essential traits ranged between 0.450 and 0.017 (for the sake of clarity, Operational definition of these 10 traits is explained in Appendix A.).

Table 2. Correlations of the essential traits with behavioral competency rating.

Essential Trait	*Mean*	*SD*	*Coefficient*	*Significance level*
Inventive	7.57	1.31	0.450	0.0050
Persistent	7.26	1.81	0.430	0.0077
Wants Frankness	5.44	1.55	0.359	0.0288
Research / learning	8.19	1.35	0.218	0.1949
Authoritative	8.16	1.33	0.194	0.2492
Comfort With Conflict	6.40	1.36	0.283	0.0887
Analytical	8.45	1.50	0.138	0.4156
Experimenting	7.87	1.67	0.239	0.1531
Handles Autonomy	7.91	1.34	0.259	0.1212
Planning	7.88	1.52	0.017	0.9184

Further analysis was conducted to arrive at a job suitability score with a combination of 10 essential traits (mentioned above) along with other desirable traits. As a consequence, for the present study 40 traits were finally grouped and analysed and a template was framed. This template has helped in mapping suitability score for each individual. Average suitability score was found to be 88.40. Further, this overall suitability score was correlated with the performance rating on the competency of problem solving, the correlation coefficient with performance was 0.616. The overall Suitability Score generated for Clinical informatics specialist had a 0.616 correlation with actual performance rating on the competency of Problem Solving.

Table 3. Correlation between overall suitability and job performance

Suitability Score	*N*	*Mean*	*SD*	*Coefficient*	*Significance Level*
	37	88.40	11.78	0.616	0.0000

The researcher would like to state that the group of traits that are drawn as essential traits are the ones that appeared to be impacting high job performance. The researcher would like to point out at this juncture the potential of Harrison Assessments tool in helping the given organization in bringing about in simpler yet profound manner an operational standard which can be applied in selection and development of Clinical Informatics Specialists particularly on competency of Problem Solving. This methodology of benchmarking was considered as a milestone in the arena of selection and development of Personnel. The study enabled the organization to apply the benchmarking template for internal consumption.

CONCLUSION

- The results of this study provided insight into the combination of traits that relate to problem solving as one of the competency within the job role of clinical informatics for the company.
- Job success formula template with an average suitability score of 88.40 and correlation of 0.616 was developed using Harrison Assessments Benchmarking technology.
- The analysis resulted in identifying 40 traits which were related to problem solving.
- The analysis also led to the identification of traits that would hinder job performance.
- A total of 10 essential traits that would impact performance along with correlations were identified
- The results of this study demonstrated a statistically significant relationship between the overall suitability scores produced and problem solving as a competency.
- Factors such as eligibility; Education and skills were not taken into consideration inorder to make sure that suitability scores were not biased Spin-off.
- The results were shared with the company's executive team. The template was accepted and decision to use it for forthcoming recruitment process for screening candidates was made.
- The template that emerged from the current study is in the process of being used in the organizations which are in the related filed of Clinical Informatics.

APPENDIX - A

TRAIT LIST FOR THE COMPETENCY PROBLEM SOLVING

ESSENTIAL TRAITS: These are traits in which higher scores generally relate better performance.

- *Inventive:* The tendency to experiment with different ways of doing something while at the same time maintaining focus on the desired objective or result.
- *Persistent:* The tendency to be tenacious despite encountering significant obstacles.
- *Wants Frankness:* The desire for others to be direct, straightforward, and to the point.
- *Research / learning:* The enjoyment of gathering and comprehending new information.
- *Authoritative:* The desire for decision-making authority and the willingness to accept decision-making responsibility.

- *Comfort With Conflict:* The tendency to be comfortable with confrontation or strife.
- *Analytical:* The tendency to logically examine facts and situations (not necessarily analytical ability).
- *Experimenting:* The tendency to try new things and new ways of doing things.
- *Handles Autonomy:* The tendency to have the motivation and self-reliance necessary for a significant amount of independence from immediate supervision (does not indicate the necessary job related knowledge).
- *Planning:* The tendency to formulate ideas related to the steps and process of accomplishing an objective.

DESIRABLE TRAITS: These are traits in which low scores hinder success but there is not necessarily a significant overall correlation with performance. In other words, poor performers have a higher incidence of low scores on this type of trait.

- *Innovative:* The tendency to create new and more effective ways of doing things.
- *Wants to Lead:* The desire to be in a position to direct or guide others.
- *Enlists Cooperation:* The tendency to invite others to participate in or join an effort.
- *Manages Stress Well:* The tendency to deal effectively with strain and difficulty when it occurs.
- *Enforcing:* The tendency to insist upon necessary rules being followed.
- *Optimistic:* The tendency to believe the future will be positive.
- *Tempo:* The enjoyment of work that needs to be done quickly.
- *Wants Challenge:* The willingness to attempt difficult tasks or goals.
- *Effective Enforcing:* The tendency to skillfully correct others when they are violating rules or performing poorly.
- *Flexible:* The tendency to easily adapt to change.
- *Flexible Organizing:* The tendency to organize things while at the same time maintaining flexibility.
- *Realistic Optimism:* The tendency to analyze the potential pitfalls of a plan or strategy while maintaining a positive view of the future and the potential benefits of the plan or strategy.
- *Takes Initiative:* The tendency to perceive what is necessary to be accomplished and to proceed on one's own.
- *Tolerance of Bluntness:* The level of comfort related to receiving abrupt or frank communications from others.
- *Precise:* The enjoyment of work that requires being exact and the tendency to be detail oriented.

- *Tolerance of Structure:* The tolerance of following rules, schedules, and procedures created by someone else.

TRAITS TO AVOID - These are traits that hinder success but don't necessarily have a negative correlation with success.

- *Defers Decisions:* The tendency to avoid making decisions by referring them to others.
- *Defensive:* The tendency to focus on self-acceptance while avoiding self-improvement (The attitude "I'm O.K. and I don't need to improve").
- *Unresourceful:* The tendency to lack persistence as well as a desire for trying new things.
- *Disinterested in Decisions:* The tendency to avoid analyzing situations and decisions while at the same time mistrusting one's own intuition.
- *Precise But Slow:* The tendency to be exact but not paying sufficient attention to productivity.
- *Rigidly Organized:* The tendency to focus so strongly on being orderly that one tends to have difficulty adapting to changes.
- *Evasive:* The tendency to be tactful without being sufficiently direct.
- *Internally Contradicted:* The tendency to lack self-acceptance while at the same time lacking desire to improve oneself.
- *Rigidly Disorganized:* The tendency to lack organization as well as adaptability.
- *Avoids Communication:* The tendency to lack frankness as well as diplomacy.
- *Careless Pessimism:* The tendency to take risks while at the same time believing that the future is bleak.
- *Fast But Imprecise:* The tendency to be productive but not paying sufficient attention to detail.
- *Forceful Enforcing:* The tendency to try to make others follow rules or procedures without sufficient attempts to enlist their cooperation.
- *Non-finishing:* The tendency to experiment with many different things without persisting in a single direction.

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LIFE STYLE DIMENSIONS AS PREDICTORS OF PSYCHOLOGICAL WELL-BEING IN COLLEGE STUDENTS

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ABSTRACT

Lifestyle, which is the way, a person chooses for dealing with events and tasks, has a decisive influence on well –being of the individual. Psychological Well-being refers to the subjective feeling of contentment, happiness, satisfaction with life's experiences and of one's role in the world of work, sense of achievement and belongingness. The present study was planned to examine the relationship between various dimensions of life style and areas of Psychological well-being among college students. The sample of the study comprised of 154 college students (70 male and 84 female) between the age range of 19 and 21 years. Two scales, i.e. Life Style Scale and Psychological Well-being Scale, were administered to the respondents. The data were analyzed by using Pearson's Product Moment method of correlation and regression analysis. The results showed that (i) Life Style dimensions (Health conscious, Academic oriented, Career oriented, socially oriented, trend seeking and family oriented) have significant positive correlation with some areas of Psychological well being (life satisfaction, efficiency, sociability, mental health and interpersonal relationship) among college students. (ii) Regression analyses revealed that academic oriented life style, socially oriented life style, family oriented life style and trend seeking significantly predict psychological well being among college students. Socially oriented life style accounted for 19 % of variance in psychological well-being among college students and the four dimensions of Lifestyle jointly explain 31% of variance in psychological well-being significantly.

Key Words- Life Style, Psychological well-being, Physical health, Sense of achievement.

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Life style is defined as a typical way of a person goes about daily living. Lifestyle is expressed in both work and leisure behavior patterns and in activities, attitudes, interests, opinions, values, and allocation of income (Regina and Alice, 2005). Lifestyle means a way a person chooses in dealing with life events and tasks. Each person has a special way according to the unconscious mechanisms, self-conscious adaptation strategies and the impact of environmental factors in dealing with assignments and life events (Behdani , Sargolzaei and Ghorbani,2000).

Life style is a living style which not only affects the individual but also affects the society. Moreover, it includes pattern of social relations, consumptions, entertainments and dressing style. It reflects person's view, habits and etiquettes and the way of life which has direct influence on the type of services that person gives or requires. Owing to this fact university students may have a different oriented life style which might result in risk behaviours which do not contribute positively to development of healthy life style. They are away from home for the first time and have to learn to manage their own affairs and adjust to new conditions of living, without the help and support of a family member to guide them. Also students who live independently are subject to less parental control that can lead to unhealthy behavior.

Psychological Well-being

Psychological Well-Being involves striving for perfection and realizes the true potential of the individual. Psychological Well-Being is an aspect of personal well-being that includes individual perceptions of sustainable happiness, life satisfaction and the balance between positive and negative emotions (Abbott et al , 2006). In general, psychological well-being contributes to mental health by the prevention of mental illness, controlling the causing factors, early detection, and prevention of factors resulting from mental illness recurrence and creating a healthy environment for establishing appropriate human relations (Tabaei, 2013). Psychological well-being is a multidimensional concept that also encompasses subjective well-being and happiness. Of course, research on health mainly focus on the negative features and the measurement tools for health are mainly concerned with physical problems (mobility, pain, fatigue and sleep disorders), mental health problems (depression, anxiety and concern) and social problems (inability to perform social roles, marital problems, Jahoda, 2009). Indicators of wellbeing include happiness, affect, life satisfaction, and quality of life (Diener, 2000; Pressman & Cohen, 2005), and wellbeing is associated with both physical and mental health (Diener & Seligman, 2004; Diener, Suh, Lucas, & Smith, 1999; Dunn, 1973).

Life Style and Well-being

A good life style leads to the accomplishment of happiness and wellness in life and achieving well-being has been the concern of philosophers since Aristotle, and is in many respects, the essence of human existence. However, well-being has moved from the realm of philosophy to that of science. A growing body of research has dwelt on what contributes to the quality of people's experiences of their lives. This has enabled a new understanding of the factors that both influence and constitute well-being. Well-being describes our happiness, confidence, physical condition and general outlook on life. It is about feeling good and taking care of yourself; responsibilities that can often be neglected when juggling the rigorous demands of everyday living in the present time. Psychological Wellbeing is a multifaceted and multi-dimensional construct and enhancing its understanding during the emerging adulthood period plays an important role in the health of young people. Moreover, college young adults not only think about life satisfaction and sociability frequently, they also rate them as very important, even more important than money (Diener & Oishi, 2000). One particular domain of health behavior, physical activity, has found to be more strongly related with psychological wellbeing among college students.

Researches show a significant positive relationship between life style and general health (Pederson, 2007; Steffy, 2009). In addition, lifestyle health behaviors affect an individual's perception of wellbeing and overall health (Galán, Meseguer, Herruzo, & Rodríguez-Artalejo, 2010; Nakata, Takahashi, Swanson, Ikeda, & Hojou, 2009; Powers & Young, 2008). Past studies on behavioral influences have also examined coping approaches, and investigators have shifted their focus to how personality as well as life style contributes to subjective wellbeing (Steel, Schmidt, & Shultz, 2008).

In view of the role of lifestyle factors in psychological well being as well as the lack of existing research, the present study aimed to investigate the relationship between lifestyle and psychological well-being and identify the predictors of well being among college students.

Objectives

1. To assess the relationship among dimensions of life style and psychological well being .
2. To identify the dimensions of life style which predict psychological well-being among college students.

Hypotheses

It was hypothesized that:

1. There would be a positive relationship between dimensions of psychological well being and areas of life style.
2. Some domains of life styles would significantly predict psychological well being among college students.

METHOD

Sample

The sample for the study consisted of 154 students studying in UG classes, who were taken from Govt. Aided college of Rewari district from Haryana. The age range of the subjects varies from 19 to 21 years with the mean age of 20.4 year. Both male and female participants (70 males & 84 females) were taken in the sample.

Tool

Following tools were used for the data collection

1. **Psychological Well Being Scale:** *(Sisodia and Choudhary, 2012)* - PWBS is consists of 50 items that are to be rated on a five-point Likert scale (1=strongly disagree, 2=disagree, 3= undecided, 4= agree, 5= strongly agree). The scale considers five dimensions of psychological well being viz. *Life satisfaction*- The act of satisfying, or the state of being satisfied; gratification of desire; contentment in the possession and enjoyment; *Efficiency*- The comparison of what is actually produced or performed with what can be achieved with the same consumption of resources (money, time, labour, etc). *Sociability*- The relative tendency or disposition to be sociable or associate with one's fellows. Mental Health- Mental health is a term used to describe either a level of cognitive or emotional well-being or an absence of a mental disorder. It is a person's overall psychological and emotional condition. *Interpersonal Relations*- An interpersonal relationship is an association between two or more people that may range from fleeting to enduring. This association may be based on love and liking, regular business interactions, or some other type of social commitment. The test-retest reliability was 0.87 and the scale was validated against the external criteria and coefficient obtained was 0.94.
2. **Life Style Scale** (Bawa and Kaur, 2006): The life style Scale (LSS) has been constructed by Bawa and Kaur. The scale considers six dimensions of *Life* style.
   (a). *Health conscious:* the life style in which the individual always remains conscious for keeping himself physically fit and fine.
   (b) *Academic oriented*: it refers to the lifestyle of an individual who always remain involved in his academic field.
   (c) *Career oriented*: individual always curious to gain more and more knowledge in his career.
   (d) *Family oriented*: a person is always in close touch with his family members and shares each and every moment of his/her daily routine within the family.

(e) *Socially oriented*: an individual who always participates in social activities.

(f). Trend seeking: an individual, who is keen to adopt new fashion and always willing to update himself with new trends.

The LSS consists of 60 items that are to be rated on a five-point Likert scale. For the positive items the scoring pattern *i.e.* 4,3,2,1,0 (4= strongly agree, 3= agree , 2= undecided , 1=disagree, 0=strongly disagree) whereas for negative items it is vice-versa (0,1,2,3,4). The reliability coefficient of the test is quite high (Cronbach alpha: 0.96, Bawa & Kaur, 2001).

Procedure

In the initial stage, the participants were contacted in their respective classes and their willingness to participate in the study was obtained. The subjects were first administered with Life style scale and after that psychological well being scale was administered on the study sample. All the subjects were assured that their responses would be kept confidential.

RESULTS AND DISCUSSION

The coefficients of correlations were computed to study relationship of psychological well-being with areas of life style obtained by Pearson product moment method. In order to have a parsimonious picture of contribution of different measures of life style on psychological well being, stepwise multiple regression analysis was applied.

The correlations are shown in Table 1. A careful inspection of Table- 1, depicted significant positive correlation between all the measures of psychological well being with the dimensions of life style.

Table 1. Inter-correlation -Psychological well-being and Life style

Psychological Well Being				*Life Style*			
	Health Conscious	*Academic Oriented*	*Career Oriented*	*Socially Oriented*	*Trend Seeking*	*Family Oriented*	*Overall lifestyle*
Life Satisfaction	**.24****	**.38****	**.27****	**.29****	-.002	**.28****	**.42****
Efficiency	**.35****	**.48****	**.46****	**.42****	.16	.07	**.56****
Sociability	.18*	.38**	.31**	.38**	.19*	.21*	.46**
Mental Health	.06	.12	.16	.06	.16	**.17***	**.22***
Interpersonal Relations	.14	**.34****	**.40****	**.46****	.04	**.34****	**.49****
Wellbeing (Total)	**.23****	**.42****	**.38****	**.44****	**.17***	**.27****	**.53****

The significant correlations between measures of psychological well being with the dimensions of life style have range of between .17 and .56. The results reveal that life satisfaction is positively associated with health conscious (r-=.24) academic oriented(r=.38), career oriented(r=.27), socially oriented(r=.29) and family oriented life style(r= .28) among college students. The results show that individual's life style in different dimensions are positively related to life satisfaction. However, psychological well-being and physical fitness are linked. The use of a leisure activity, such as physical activity, increases well-being and lowers mental health-issues (Iwasaki, 2001). Chow (2007) found physical health to be a significant predictor of psychological wellbeing in undergraduate students. Physical exercise alleviates negative moods, reduces anger, and decreases depression and anxiety (Hassmen, Koivula, & Uutela, 2000).

Another measures of psychological well being, efficiency had significant positive relationships with four areas of life style *i.e.* health conscious (r-=.35) academic oriented(r=.48), career oriented(r=.46), socially oriented(r=.42) among college students. The results explain that a person high on efficiency also shows better performance on health , academic , career and socially oriented life styles. These results indicate that high efficiency among college students is related to better life style and vice versa. Sociability, a measure of psychological well-being has a significant positive association with all the areas of life style. The results revealed that sociability of a person leads to better life style and significantly contributions to different areas of life styles among college students.

Mental health, a component of well-being exhibited a significant positive relationship with only one dimension, *i.e.*family oriented life style(r=.17) among college students. The results show that a person who is in close touch with his family members and sharing within the family occurs, has better n mental health. Another measures of psychological well being, interpersonal relations had significant positive relationship with four areas of life style *i.e.*, academic oriented(r=.34), career oriented(r=.40), socially oriented(r=.46) and family oriented life style (r=.34) among college students. These results show that interpersonal relations may be facilitated due to better and healthy life style. Overall psychological well being had a significant positive correlations with all the dimensions of life styles and the value of correlations ranged from .17 to .53 .

The present results received support from existing literature linking physical activity with greater life satisfaction, positive effect, and happiness (Hyde, Maher, & Elavsky, 2013). Similar findings reported by Pisinger , Toft, Aadahi , Glumer, and Jorgensen (2009)and Rohrer , Pierce, and Blackburn (2005), who also found that unhealthy lifestyle is negatively relate to mental health and good mental health was independently associated with physical activity.

Although correlation is very useful statistical tool for observing the associations between the variables yet it do not provide any information regarding the predictors of the variable. Stepwise regression was used while taking psychological well-being as dependent variable and measures of life style as predictor. Table 2 shows the results to stepwise regression analysis.

Table 2: Predictors of Psychological Well-being as shown by stepwise multiple Regression

Step	*Predictors*	*Multiple R*	*R Square*	*R Square Change*	*β*	*F*	*P<*
1.	Socially Oriented Life Style	.44	.19	.19	.442	31.84	.000
2.	Academic Oriented Life Style	.50	.26	.07	.278	10.95	.001
3.	Family Oriented Life Style	.53	.28	.02	.155	3.95	.04
4.	Trend Seeking Life Style	.56	.31	.03	.188	6.17	.01

Analysis revealed four significant predictors of psychological well-being with an overall multiple R of .56. Socially oriented life style contributed maximum to the prediction of psychological well being among college students. The multiple R for this predictor is .44 and $R^2 = .19$ ($F=31.84$, $p< .000$), which means that socially oriented life style accounted for 19 % of variance in psychological well-being.

Academic oriented life style, appeared as another potent predictor which was entered at step two , where the multiple R increased to .50 with the entry of academic oriented in the equation after socially oriented life style. The F ratio computed for the significance of multiple R, at step two, equals to 10.95 which is significant at a level < .001. In an academic setting, psychological well-being and stress do have a relationship. Rogers, Creed, and Searle (2012) found academic stress to be a strong predictor of well-being in medical school students. The results of this study suggested students who appraised school workload as stressful or threatening displayed lower levels of well-being (Rogers et al., 2012).

The next variable which entered in the regression equation, is family oriented life style. With the entry of this predictor at step three, the multiple R became .53. The F ratio at this step equals to 3.95. The degree of freedom being 3/151, it is significant at .04 levels. The last variable entered in the regression equation is trend seeking life style and with the entry of this predictor at step four the multiple R increased to .56 and R^2 increased to .31. The F ratio of this step equals to 6.17 which is significant at .01 level. The predictors socially oriented, academic oriented , family oriented and trend seeking life style, jointly account for 31% of the variance (R^2=.312) in psychological well-being of the college students.

The present study was aimed at assessing psychological well being among college students, in the light of different areas of life styles. The generation of such knowledge is essential for better understanding about the role of life styles in psychological well-being among young adult. It is pertinent to mention that results of the study appear to lend substantial support to the hypothesis formulated.

The first hypothesis regarding the relationship between psychological well-being and life style is accepted because it is found that there is positive relationship between the variables. The second hypothesis is also accepted because it found that four areas of life style (social, academic, family and trend seeking) significant contributed in psychological well being among college students in present study.

Results of the analysis showed that Lifestyle measures predict psychological well-being significantly among college students. The results of the present study are consistent with previous studies (Behdani, Sargolzaei & Ghorbani; 2000 Harris, Duncan & Boisjoly, 2002; Clark et al, 2011). Other researchers also reported the impact of lifestyle on psychological well-being and mental health. These studies include research done by Argys, Rees, Averett and Witoonchart (2006) who reported an impact of lifestyle on the increase of personality and behavioral problems in adolescents. Aghaie and Malek (2004) found a positive relationship between lifestyle and couple satisfaction. A recent study on life style in India by Singh, Pratap and Mishra(2012), provides support to the present result. The authors suggested a need for urgent attention to deal with the emerging concerns of risks and promoting factors of health through relevant policy-oriented reformulations, coordinated efforts among stakeholders, and initiating culturally appropriate lifestyle interventions among adolescents. In Indian setting, a recent study by Singh and Kumar (2014), on mental health of college going youth in relation to their lifestyle patterns, showed that lifestyle was significant positively related to mental health.

CONCLUSION

The findings of current study, revealed that lifestyle has a significant relation with psychological well-being among college students. Some dimensions of Lifestyle contribute to college students' wellbeing and can have lifelong health implications. Adoption of Healthy life styles could go a long way in enhancing well being among young adults.

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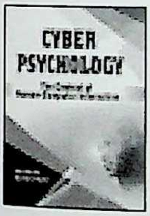

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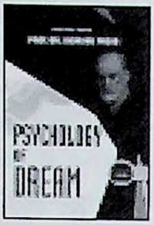

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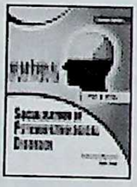

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VOL. 11, NO. 2, March, 2017

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EDITORIAL

The current issue of the Journal of Health Psychology has fourteen research articles that deal with variety of psychosocial issues relating to health and illness. The first article by Sushama Bhosale and Alena Slezackova explored the relationship between life style patterns and depression among working women of various organizations. Nilesh Thakre and Kavya Prasad investigated the work-life balance, organizational role stress and satisfaction with life amongst print and non-print media professionals. The results indicated lower organizational role stress and higher work-life balance in print media professionals than non-print media professionals. To enhance work-life balance of employees, authors have suggested strategies like arranging flexible working hours and introducing compressed work week and family leave policies.

The next article enlisted focuses on how climate change perception and adjustment will predict academic achievement. The following study enlisted in this issued by Poonam Devi, NovRattan Sharma and Deepti Hooda attempts to study the relationship between subjective vitality and hope among adolescents. Correlational analysis showed positive correlation between subjective vitality and hope. Subjective vitality was found to be positively and significantly associated with hope, indicating that individuals full of positive energy are also hopeful in their life. Individuals with high subjective vitality make their own pathways and find different agency to follow these pathways to achieve their goal. The results of the study showed non-significant gender differences on subjective vitality but significant gender differences on hope. Devina Sharma and Uma Joshi studied difference in subjective well-being among public and private sector bank employees. They reported that SWB of public sector banks employees was better than the employees of private sector banks.

The next article by Punam Devi Bagi aimed to assess the effect of yoga practice on wellbeing. Shilpa Kamboj, Anjali Malik and Sarvdeep Kohli assessed Mental Health of patients with Chronic Kidney Disease (CKD), sixty patients not yet requiring dialysis and sixty patients on maintenance hemodialysis. The results report that patients on maintenance hemodialysis had higher anxiety, higher depression, greater loss of behavioral/emotional control, poor general positive affect, more psychological distress and poor global mental health score than patients not yet requiring dialysis. Thereby, emphasizing the need for development of adequate psycho-education for improving the mental health of CKD patients.

Shivalika Sharma and Gayatri Raina compared male and female bureaucrats in terms of subjective well-being, life satisfaction and coping behavior (problem focused coping, emotion focused coping and avoidance coping). The authors found that female bureaucrats scored significantly higher on subjective well-being and life satisfaction as compared to their counterparts. Furthermore, male bureaucrats significantly scored higher on avoidance coping as compared to female bureaucrats. Annu, Deepti Hooda and NovRattan Sharma in their article examined the relationship between Emotional Intelligence and Resilience. The results point out that three dimensions of Emotional Intelligence *i.e.*, Motivation, Self Awareness and Social Skills significantly and positively predict Resilience. The findings of the present study highlights the need for focusing on emotional intelligence while designing and developing intervention programs in order to enhance resilience.

Hardeep Lal Joshi and Gaurav Arya in their paper explored the impact of yoga practice on quality of life, frustration tolerance, health related problems, and cognitive functions among normal healthy adolescents. The result reported that yoga practicing group had better quality of life, high frustration tolerance, better memory and low physical and mental health problems as compared to non-yoga group. The 12th article in this issue examined the relationship between parental styles and measures of self-efficacy among adolescents. The author, Mandeep Sharma reported that parenting practices have a significant impact in self-efficacy among the students. The 13th paper of Touseef Rizvi and S. Reshma Jamal examines traumatic stress among Kashmiri people. The changing society's attitude towards environment by changing society's culture is reviewed by Sunita Rani, and Babita Saroha in the last paper.

All the articles enlisted in this issue are empirical and will provide direction for young researchers. Editors express gratitude to all the contributors for their research contributions. Editors are also grateful to the referees and members of editorial board for their valuable inputs. The members of the editorial board are of the view that the journal tries to sensitize the readers to various health related psychosocial issues that would pave the path towards a healthy community.

Editors

DEPRESSION AND LIFE STYLE OF WORKING WOMEN ACROSS VARIOUS ORGANIZATIONS

Sushama Bhosale and Alena Slezackova***

ABSTRACT

The focus of present study was to explore the life style patterns and their relationship with depression among working women of various organizations. A total of 400 women working in different organizations – industries, hospitals, banks, educational institutions and in call centers were purposively selected. They were administered Beck Depression Inventory BD-II and Life style Inventory. The results showed that the level of economic status followed by education and social support are the prime factors contributing to depression in working women.

Key Words: Life style, Depression, Working women, Various Professions

Indian society is moving towards industrialized urban society where changes causing adverse effects on life style and well -being of working women. Women are twice as likely as men to experience a major depressive episode and males score higher on general well -being than females (Shayam & Yadav, 2004). The terms 'life satisfaction', 'happiness', 'quality of life' and 'wellbeing' are often used interchangeably. Depression may occur at any age during a women's life irrespective of educational, economic and ethnic groups and the consequences can include an increased risk of suicide, morbidity, medical illness and risk of poor health care (Diner & Rayen, 2009). Some Indian studies showed that middle age working women reported more psychological distress, more medical problems, and lower moral and more negative effects than men (Varma & Dhawan, 2006). Increase in women's participation in labor force over the past few decades have led to increased interest in the effects of employment on women's well -being. Women employment has been investigated as either beneficial or detrimental to

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women's psychological well -being. Women employment may be associated with better psychological functioning. This effect may be mediated by the over absorption of one's time and resources within a particular identity role (Elgar & Chester, 2007). Indian studies evidenced that institutionalized aged are more depressed. The studies conducted by NIMHANS found that one in every 15 adult Indians, suffer from depressive illness and as much as 40% of the population is likely to cross the line of clinical depression (Sahu & Rath, 2003). A report released by the WHO (2002) states that depression threatens to be the world's most common illness by the end of century especially in women. The reason seems to be increasing stress levels, demands of work place, mechanization of life and nuclear families along with disillusionment with the old world values and systems that makes a person a soft target of depression. The change in family patterns and the variations in social and economic status between generations are additional reasons of stress. These stresses faced by many women include major responsibilities at home and work caring for children and looking after aging parents (Chadha & Bhatia, 2005).

Depressive illness makes women feel exhausted, worthless, helpless and hopeless and sometimes develop the feelings to give up. Women's reproductive cycle and pre and post menopause bring fluctuations in mood. These events may lead to depression by fostering low self-esteem, a sense of helplessness, self-blame, social isolation and low morale (Pandey, 2004, Lykken et al, 1996). Life style factors have a greater psychological impact than genetics, which increased longevity, delay illness and improve the quality of life. Previously, the women workforce in India was employed in non-managerial, subordinate or low profile positions. Now a day they occupy almost all categories of positions in the workplace. These changes in work culture have added to women's duties and responsibilities to their family as well as to society. The conflicts between completing work demands and personal and family needs seem to be the most probable reason for the scenario of work and life conflicts. It was found that health status, education, life style, family relationship and social class as some of the major affecting factors in the lives of women (Mathew & Panchanatham, 2009). As working women get married, they have additional responsibilities and when they become mothers, they have to manage the primary care of children and extended family. Demographic changes as seen in the increasing number of women in the workplace and dual career families have generated an increasingly diverse workforce and a greater need of women employees to balance their work and non work lives (Rajadhyaksha & Bhatnagar, 2000, Bharat, 2003). It is clear that working women will have more problems since they have to play multiple roles. It was hypothesized that working women of different professions differ significantly in their life style due to nature and job and job conditions. The main focus of the study was to explore life style patterns and their relationship with depression of working women.

METHOD

***Sample*:** The sample consisted of 400 employed women working in five different organizational sectors- industries (77), Hospitals (73), Banks (88), Educational Institutes (82), and in Call Centers / BPO'S (80). Age range of this sample was 25-45 yrs. The mean age and SD of the sample was 32.08 and 9.02.

Tools

i) **Beck Depression Inventory BD-II (Beck, 1979).** This is a self – report questionnaire intend to assess the severity of current depressive symptomatology. It requires minimal time and no special training to administer. Respondent has to rate symptoms on a four point scale. The BDI-II is positively correlated with the Hamilton Depression Rating Scale with a Pearson r of 0.71, showing good agreement. The test was also shown to have a high one-week test–retest reliability (Pearson r =0.93).The test also has high internal consistency (á=.91).

ii) **Life Style Inventory**. This inventory was developed by Mathur (2006) based on Life Style segmentation of Kayank & Kara (2000). It has 107 items, having alternate responses yes and no. The life style pertains to Nutrition (Diet), Family relationship, Physical fitness, Stress coping activities, social support, and Economical Status and Educational level. The split half reliability was r=.80, validity was 0.70.

Procedure

All the participants were nonrandom purposively selected. They were personally contacted for data collection. Before administering the tools, the participants were briefed about the objective and usefulness of the study. Personal information of the participants was acquired through demographic sheet and the confidentiality of their information was ensured. The participants were asked to fill both the tools according to the mentioned instructions. Participants were thanked for their cooperation in the study.

RESULTS AND DISCUSSION

In total life style scores, One way Anova indicates significant differences between employed women in different professions (F=19.655, P=0.000).

Table 1: Mean and SD of the various Profession groups.

Profession	*Mean (M)*	*SD*
Teaching	231.51	39.26
Banking	217.84	29.87
Health Organization	200.32	28.63
Industries	139.37	16.42
Call Centers/BPO	114.98	14.56

The Table 1., shows that the mean scores of women in teaching (M=231.51, SD=39.26), women in banking (M= 217.84, SD= 29.87) and women in health organizations (M=200.32, M=28.63) significantly differed from mean scores of women working in Industries (M=139.37, SD=16.42) and women working in Call Centers/BPO's (M=114.98, SD=14.56).

Table 2: Correlation of Life style Dimensions with Depression in working women of various professions

Measures	*Depression r value*
Nutritional Level	-0.39*
Family relationship	-0.37*
Social relationship	-0.62*
Physical fitness	-0.48*
Stress reduction Exercise	-0.31*
Educational level	-0.56**
Economic Status	-0.62**
Life Style	-0.43**

**p< 0.01; *p<0.05

Table 2. indicates that poor life style patterns i.e. nutritional status, educational level, economic status are significantly negatively related with depression (p<0.01). Similarly family relationship, social relationship, physical fitness, stress reduction exercises are also negatively related with depression (p<0.05).

Although correlations are very useful statistical tool to know the associations yet they provide no idea about the predictive power of variable. Therefore regression analysis was worked out.

Table 3: Predictors of Depression in Working women

Predictors	*R*	*R Square*	*Adjusted R Square*	*Change*	*Beta Coefficient*
Family Relationship	.39	.14	.12	1.76	19.71**
Social relationship	.30	.11	.09	1.47	14.67**

**p<0.01

Regression analysis helps one understand how the typical value of the dependent variable changes when any one of the independent variables is varied, while the other independent variables are held fixed. Result of regression analysis in Table 3 shows predictors of depression in working women. It showed Family relationship and Social relationship contributed and obtained a significant predictive value. Family relationship explained 17.6% of variance and social relationship 14.7% of variance of depression respectively. Thus the findings of regression analysis suggested that family relationship and social relationship emerged as more significant predictors of depression in working women.

Table 4: Percentage distribution of Working Women on measures of Depression and Life Style

Variable	Depression				
Life Style	*Minimal*	*Mild*	*Moderate*	*Severe*	*Total*
Poor	4.1 (2)	26.5(13)	28.6(14)	40.8(20)	100 (49)
Average	17.9(52)	35.9(104)	27.9(81)	18.3(53)	100(290)
Good	60.6(37)	23.0(14)	13.3 (8)	3.3(2)	100(61)
Total	27.5(91)	28.5(131)	23.2(103)	20.8(75)	100(400)

x^2=77.234** df=6

Table 4. shows that working women having poor life style showed higher trend of mild and moderate depression. Whereas good lifestyle of working women scored minimal depression than their counterparts. The table value of x^2 at 0.05 levels is 12.592 and at 0.01, it is 16.812. But the computed x^2 value is 77.234, which is quite higher than the x2 table value; hence it's accepting that the life style positively affects the level of depression.

The modern working women seem to have created a cocoon around them in society to here everyone is racing to do the others. It has been observed that higher rates of depression in women are not due to greater vulnerability but due to particular stresses that many women face. These stresses faced by many women include major responsibilities at home and work. Although the employment and earning money and to become a self-reliant is important, intrinsic satisfaction and life style does affect on well-being of working women. The present study focuses on the fact that employment of women not affect on depression but job nature and life style does more.

On the whole Scheffe's post hoc test revealed and it was found that women working in industries and in Call Centers/ BPO had highest depression and women working in teaching, health industries and bank had mild depression. In Industry women work for considerably longer hours (8-10 hrs) compared to other sectors. In addition such women are involved in risky and stress prone jobs. An informal discussion with working women in industries revealed that they had restricted number of holidays and works in unhygienic environment and also not satisfied with their salaries as the effect they couldn't make possible to involve in all family functions and social get together. A teacher is one who helps student often in a school. Women teachers derive intrinsic satisfaction in the process of teaching students. An informal interview with women teacher, women working in bank and in hospital are satisfied with all the facilities provided and express their view about the interactions with people due to their nature of work (Pandey, 2008; Dhillon & Singh, 2004).

The results of the present study are in agreement with the study by Sharma et al (2001) , who examined the impact of job stress on the mental health of 120 women aged 25-50 years and above with low (non-working), moderate (job requiring approximately 4 hours per day) and high job stress (job requiring 8 hours or more per day). The findings showed that the moderate job stress group was less prone to psychological depression. A Korean study on nurses reported moderate levels of life satisfaction, low level of work satisfaction and high levels of burnouts (Sunkyung & Kim, 2004). It may be noted from the above studies that employment of women provides opportunity to become self-reliant and hence it was expected that working women would be higher on psychological well-being but working women have to carry out duel role, they are more face conflicting situations and stressful life events may result in experiencing depression. Working women often lack of mentors to provide guidance and advice and they undergo with pressures of choosing to have a child or a career. In the present study it was observed that positive family relationship and social relationship helps to keep away from depressive symptoms. Current findings are supported by existing research evidences. The exploratory factor analysis of psychological well-being and its relation to depression and distress showed that in general women significantly presented with lower levels of well-being expect in positive family and social relations (Fava et al, 2003; Ryff, 1991; Robinson, 2003). The present study underlines the fact that it is not employment of women that affects on depression rather job nature and life style does more.

The present study shows that women are worst sufferers due to imbalance between work pressure and housekeeping. So the women need to learn skills to their inner spiritual self and in the company of that spiritual inner being (Arnett, 2002; Adelman & Autonucci,1993). However, promoting psychological well-being and to keep depression away of employed women requires co-operation of people at individual, community, and at the societal level at large.

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ORGANIZATIONAL ROLE STRESS, SATISFACTION WITH LIFE AND WORK-LIFE BALANCE AMONG PRINT AND NON-PRINT MEDIA PROFESSIONALS

Nilesh Thakre and Kavya Prasad***

ABSTRACT

The media sector is known as fast paced field where employees mostly work round the clock. Professionals in this field face challenges related to erratic work schedules, job pressures and role overload which makes it difficult to balance work and family life that in turn results in stress and impacts satisfaction. The present study investigated the work-life balance, organizational role stress and satisfaction with life amongst print and non-print media professionals. The participants of the study consist of 85 employees working in media houses within age range of 24-48 years from Mumbai and its suburbs. The data were analysed by using t-test and revealed a significant difference between print and non-print media professionals on work life balance $t\ (83) = 4.23\ (P < .05)$*, on organizational role stress* $t(83) = 15.48\ (P < .05)$*. The t-value for satisfaction with life amongst print and non-print media professionals was found to be not significant,* $t(83) = 1.06$ *(NS). This trend indicated that, print media professionals have lower organizational role stress and higher work-life balance than non-print media professionals. This difference between both groups can be attributed to nature of work of non-print media which consist of 24x7 demanding job, with erratic work hours and which demands an individual to stay in touch with their work roles even when not at workplace.*

Keywords: organizational role stress, work-life balance, satisfaction with life, print media professionals, non-print media professionals

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The 'media' is a profession where individuals rarely sleep, hardly enjoy festivals and have erratic work schedules. 'Media' is of course the plural of medium which is the conductor, the channel, and the means by and through which information is transmitted (Thacker, 2012). We receive news every day because there are journalists, news reporters, writers, anchors, and news presenters, who work hard to keep us updated about the daily happenings worldwide. The media can be sectioned into, print and non-print media. The print media refers to newspapers and magazines and the non-print media refers to news channels and radio channels. The non-print media, like the primetime news channels, radio channels, and now the internet too can provide us with information of any major event across the globe almost instantaneously. In today's technologically advanced world print media would be a bit late to share information.

It is widely known that print or non-print media mostly deals with delivering news. It is the means which connects us to the incidences around the world. Any minor development in any part of the world is slated to be included in 'breaking news' or 'news bulletin'. This requires media professionals to be on their toes round the clock. Little lesser known is that, it is not only the anchors and reporters who are involved in bringing us the news or the happenings from around the world but also there are crew members who work constantly to bring this information to us. Lives of such professionals, especially the reporters and the anchors, demand them to be constantly in touch with their work. These professionals believe and agree that they are likely to miss important events owing to their professional commitments. Although, there is no empirical evidence to support the amount of leisure, family time, time for recreational activities and holidays that are compromised by such media professionals.

In current times, we follow a globalized approach in just about every possible work. Since organizations whether private or public, independent or collaborative all are embracing a globalized work style. The need for adequate awareness and the right attitude towards working in a macro work environment has become all the more essential. This is a part of parcel of everyphase in an individual's life. It is not only competitive market, but also focuses on outputs.It becomes a round the clock job where people are constantly connected to their work and finds it difficult to detach from work. The boundaries between work and family are distortinggradually each year. With the workload demands increasing, need to excel in one's professional career and be satisfied with it is gaining prime importance.

When there is stress pertaining to one's job or occupationthen up to some extent it will reflects on theirlive outside the workplace. In this demanding work culture where one constantly needs to perform in order to consistently prove one's worth, work-life balance has to be maintained and managed. Once this has been achieved, we can directly get an account and reflection of it on an individual's satisfaction with their life. This implies a person's satisfaction with their professional, social, personal, familial life and time for leisure activities. Essentially, we could then say that satisfaction with life is how well an individual balances his or her work and life, as well as how adequately they are able to manage stress.

Organizational Role Stress

There are many variables which have been related to organizational stress. Stress is associated with impaired individual functioning in the workplace. A number of aspects of working life have been linked to stress. Aspects of work itself can be stressful, namely work overload and role-based factors such as lack of power, role ambiguity, and role conflict (Matteson &Ivancevich, 1987).Job stressors are well documented as affecting work-life conflict which includes role conflict, role ambiguity, and role overload. Studies have affirmed the effects of job stressors on work-life conflict (Parasuraman, Purohit& Godshalk,1996, Fu and Schaffer, 2001). Job or work role stressors in turn are posited to affect individual career satisfaction and well-being. Studies on stress and work-family relationships indicate that work stressors contribute to job dissatisfaction, heightened life stress and declined career satisfaction (Parasuraman et al., 1996). Judge,Boudreacl&bretz. (1994) showed that job stress and job satisfaction were negatively and reciprocally related. Most work-life research analyses work and life stressors as antecedents of work-life conflict and emphasize the potential stress related with combining the roles of family and work. It is widely acknowledged that work-life conflict produces a variety of outcomes which are not good for the organization and for the individual as well (Frone, Yardly& Markel, 1992; Netemeyer, Boles &McMurrian, 1996).

An important work stressor that leads to work-family conflict is role conflict. This is the simultaneous occurrence of two or more sets of pressures, such that complying with one would make compliance with the other more difficult (Rizzo, House &Lirtzman, 1970). Inter-role conflict arises from opposing role pressures in diverse work related roles, such as complying with two or more demands at the same time. Intra-role conflict, occurs when the role pressures related with membership in one organization are in conflict with the pressures stemming from membership in other groups (Kahn et al., 1964). Such conflict occurs when an employee who values a particular role is constrained by membership with another role (Greenhaus&Beutell, 1985; Frone et al., 1997). Work-related conflict has been found to directly and indirectly influence work-life conflict (Fu and Schaffer, 2001; Carlson, 1999; Aryee, 1992; Frone, Russell & Copper, 1992).

Another work stressor that leads to work-life conflict is role ambiguity. The role ambiguity implies a lack of information or clarity required to perform a particular role (Kahn et al., 1964; Gupta & Jenkins, 1985; Lewis & Cooper, 1988). Role overload occurs when an individual takes on too many roles at one time. High levels of overload mean that an individual has too many role demands and obligations, but is unable to perform them all effectively (Barnett and Baruch, 1985).

Satisfaction with Life

Satisfaction with life refers to the complete cognitive judgmental aspects of subjective well-being (Diener, 1984). Satisfaction of life depends not only on what people have, but also on the criteria that,what people choose for themselves and how they judge their own achievements (Diener, Emmens, Larsen, & griffin, 1985). Life satisfaction is also described as a psychological state that may be broadly associated with psychological well-being (Neugarten, Havighurst,& Tobin, 1961) rather than some "objective" assessment of the person's quality of life.

It seems that work life imbalance influences one's level of job stress and satisfaction with life. Although a profession like media, satisfies the creative appetite of being on the television and receiving the limelight, that job demands take away precious and irreplaceable time to be spent with family and friends. The criteria, references and standards adopted by an individual to derive meaning of quality of life are a personal choice and are largely influenced by social, cultural and religious traditions of a community or group (Diener, 1984, Campbell, Converse, & Rodgers, 1976). Nevertheless, hopeful individualis satisfied with his/her life (Thakre, 2013). A study conducted by Aryee, Luk, Leung, & Lo (1999) revealed that parental overload was related to family–work conflict (FWC). The work overload was related to both work–family conflict (WFC) and FWC. Spousal support moderated the effect of parental overload on FWC. The findings further revealed that FWC was negatively related to job and life satisfaction, but neither WFC nor FWC was related to family satisfaction.

Research studies have consistently shown that material comforts play minimal role in predicting satisfaction with life (Rain, Lane, & Steiner, 1991, Vermunt,Spaans, &Zorge, 1989). A person may have a high quality of life yet lack satisfaction, whereas another person may have a lower quality of life yet have greater satisfaction. A path analysis study was conducted by Rice,Frone, &Fartin (1992) on work-non-work conflict and the perceived quality of life. It showed that the direct paths between work-non-work conflict and global life satisfaction were non-significant; and the indirect paths between work-non-work conflict and global life satisfaction, which are mediated by job satisfaction and non-work satisfaction, were all significant.

Work-Life Balance

The concept of work-life balance is gradually becoming a huge concern in India.Work-Life balance is a concept that encompasses prioritizing between work and life. It reflects the balance between fulfilling one's roles, responsibilities and duties at work and at home. Research on work-life balance has lately gained much importance, as various scholars are finding out the level of work-life balance among the employees. This spike in research has however resulted in no efforts to look into the lives of media professionals in the print and non-print media sector.

This however does not imply that everyone involved in such a profession struggles with their lives; there are individuals who manage and balance their professional and private lives with proficiency. Striking a balance, maintaining an equilibrium is not an impossible task. However, sometimes like all professions, there comes a point of fatigue and this fatigue if not addressed timely may lead to further distress causing disruption at work as well as disruptionat home.

Past research explored and understands the ways in which family and work role impact one another (Greenhaus&Parasuraman, 1999). It is a competition for both time and energy between the different roles filled by an individual. Work and family roles can have a meaningful impact on one's well-being and satisfaction, as both roles are central components in people's lives and thus demand a great deal of time and energy (McAuley et al., 2008). Work/family conflict is bidirectional, meaning that work roles can interfere with roles and responsibilities in the family domain, and family related roles can interfere with the work domain (Mesmer-Magnus &Viswesvaran, 2005). Another concept is work/family enrichment which exploresthe potential positive outcomes of managing work and family roles. Work/family enrichment is a construct that represents how work and family roles can benefit one another and is defined as "the extent to which experiences in one role improve the quality of life in the other roles" (Grzywacz& Marks, 2000). Work/family enrichment is bidirectional in that work experiences can improve the quality of one's family life (work to family enrichment) and family experiences can improve the quality of one's work life (family to work enrichment). Existed research suggests that the positive aspects of balancing work and family roles are distinct from the incompatibilities that exist between work and family roles (Grzywacz& Marks, 2000; Wayne, Musisca, &Fleeson, 2004).

Work/family conflict and work/family enrichment appear to be related yet distinct constructs, suggesting the need to explore and better understand how these constructs may co-exist. Parasuraman and Simmer (2001) studied the impact of work and family role characteristics on work-family conflict and indicators of psychological well-being among self-employed and organizationally employed women and men. Results show that employment type and gender have independent main effects. Self-employed person enjoys greater autonomy and schedule flexibility at work and report higher level of job involvement and job satisfaction than those employed in organizations. They also experience higher levels of work-family conflict and lower levels of family-work satisfaction than organizational employees.

Boyar, Maertz, Person and Keough (2003) tested the full measurement and structural model of work-family conflict (WFC) and family-work conflict (FWC). The results show that work stressors such as role conflict and role overload directly lead to work-family conflict and work stressors also indirectly lead to increased work-family conflict and averts that work-family conflict and family-work conflict has negative impact on turnover intentions of the employees. Berg, Kalleberg and Appelbaum (2003) found that ability of employees to balance their work and family lives depend on the characteristics of their jobs and type of organizations they work and it also depends on their family situations. They found high-performance work practices- i.e. the opportunity to participate in decisions, informal training, pay for performance and good promotion opportunities- all have a positive effect on work-life balance. Job demands such as long weekly hours, involuntary overtime and conflict with co-workers reduces worker's ability to balance work and family responsibilities.

Hypotheses:

H1: There would be significant difference between print and non-print media professionals on organizational role stress.

H2: There would be significant difference between print and non-print media professionals on satisfaction with life.

H3: There would be significant difference between print and non-print media professionals on work-life balance.

METHOD

Design: For the present study a two group design was used to compare print and non-print media professionalson organizational role stress, satisfaction with life and work-life balance.

Sample: The participants of the present studyconsist of 85 men and women working in different print and non-print media houses(40 print and 45 non-print) as news reporters, news presenters, journalists and correspondents. All participants are residents of Mumbai, Maharashtra. Participants were assessed with the help of work-life balance questionnaire, organizational role stress scale and satisfaction with life scale. Participants were assured that their inputs are purely for educational purposes and that they will not be compensated in any manner. The convenience and snowballing sampling technique was used to select participants.

Tools: The following three separate tools wereused for the present study:

i) ***Organisational Role Stress Scale (ORSS)*:** Organizational role stress of the participant was assessed by using organizational role stress scale (ORSS) by Pareek (1997). It measures individuals' role stress and role conflict within an organization. The Cronbach's alpha value of the ORSS scale is 0.93, which indicates high reliability of the scale. ORSS has 50 statements with five-point Likert scale. The scores for each role dimension ranges from a minimum of 0 to a maximum of 20 and total scores range from 0 to 200, as the scale has ten dimensions each which have five items. This scale comprises of the following 10 dimensions: Inter-Role Distance (IRD), Role Stagnation (RS), Role Expectation Conflict (REC), Role Erosion (RE), Role Overload (RO), Role Isolation (RI), Personal Inadequacy (PI), Self-Role Distance (SRD), Role Ambiguity (RA) and Role Inadequacy (RiN). All the stressors, apart from SRD, have a high Cronbach's alpha. In the present study organizational role stress is measured as global organizational role stress.

ii) ***Work life balance:*** Work life balance of the participant was assessed by using scales developedby Carlson, et al. (2000, 2006). It consists of two bi-directional dimensions of work life balance, namely family/ work enrichment and work/family conflict.In the present study global score are considered as work life balance. The 18-item work–family conflict scale consists of nine items that measure the work to family direction of conflict. The item of the scale is for e.g., 'My work keeps me from my family activities more than I would like.' The Cronbach alpha for this scale was .91. The other nine items measures the family to work direction of conflict. The item of the scale is for e.g., 'Due to stress at home, I am often preoccupied with family matters at work.' The Cronbach alpha for this scale was .92 (Carlson et al., 2000). The 18-item work–family enrichment scale consists of nine items measuring the work to family direction of enrichment. The item of the scale is for e.g.,'My involvement in my work helps me to acquire skills and this helps me to be a better family member.' The Cronbach alpha for this scale was .94. This scale also consists of nine items measuring the family to work direction of enrichment. The item of the scale is for e.g., 'My involvement in my family puts me in a good mood and this helps me be a better worker.' The Cronbach alpha for this scale was (Carlson et al.,2006).

iii) **Satisfaction with Life Scale:** Satisfaction with life of the participant was assessed by using satisfaction with life (SwL) scale constructed by Diener(1984). The SwL is a short 5-item instrument designed to measure global cognitive judgments of satisfaction with one's life. The internal consistency of the SWLS (á=0.86) was found to be high. Correlational analyses showed that SWLS had adequate concurrent validity.

Procedure: The human resource executives and the public relations executives from media houses (print and non-print) were contacted and approached for data collection. They were provided with general nature of the study and confidentiality of results was assured. The questionnaires were personally handed over to the media professionals for data collection. After obtaining the necessary permission and written consent; completed work-life balance questionnaire, organizational role stress scale and satisfaction with life scale were collected from the participants. Post collection of data; verification, scoring, tabulation and analysis were carried out.

RESULT AND DISCUSSION

The media sector, particularly print and non-print media have received relatively low attention for building a base of empirical evidence. In order to gain a better understanding this study measuring the work-life balance, organizational role stress and satisfaction with life among print and non-print media professionals has been undertaken. The obtained results are presented and discussed in following paragraphs.

Organizational Role Stress

Hypothesis 1 of the study stated that 'there will be significant difference between print and non-print media professionals on work-life balance', for testing this hypothesis t test was conducted. The mean scores obtained by print and non-print media professionals were compared by using *t*-test for the independent sample. The results of the descriptive statistics of the means, standard deviations and t-test for organizational role stress are shown in Table 1.

Table 1: Mean, SD and t values for Organizational Role Stress

Media Type	*N*	*Mean*	*SD*	*t - Value*	*p*
Print media professionals	45	59.06	6.90	15.48*	0.00
Non-print media professionals	40	90.02	11.24		

* $p < .05$

It can be seen from Table 1, that the mean value (M=90.02) of non-print media professionals is higher than mean value (M=59.06) of print media professionals on organizational role stress. Analysis of data using t-test showed significant difference between non-print media professionals and print media professionals on organizational role stress, t (83) = 15.48, $p < 0.00$. This depicts that non-print media professionals are higher on organizational role stress than print media professionals. Thus, hypothesis 1 is accepted.

It could be seen that stress levels for non-print media employee is higher due to their involvement in quite a fewjob and personal roles. Roles other than one's job description influence experiences in life. An adult has a professional's role and a familial role to fulfil. The inability to meet the demands of either role would lead to stress. Organizational role stress is stress experienced at workplace as a result of factors like resource inadequacy, role erosion, self-role distance and inter-role distance (Pareek, 1997).

Presence of stressors at workplace can lead to spillover effect, as experiencing stress at home. The influence of an individual's roles in life will have an impact on stress experienced in workplace.This stress may have negative influence on mental and physical health of employees. This suggests that a healthy mental and physical health owing to one's multiplicity of role delivery. The involvement of an individual in a multiplicity of roles yields a net gain of benefits over costs with respect to both physical and mental health (Baruch & Barnett, 1986).

Kephart (2003) suggested that demographic variables like gender, age, educational qualification and ethnicity played a huge role in an individual's appraisal of stress in the workplace. These factors play a role in enabling a person in constructive thinking in order to cope with stress. The higher stress in non-print media employees can be attributed to erratic work schedules, job-role demands and demographic variables. The women employees who fail to receive family support and absence of cooperation from co-workers reported more stress than women who do receive support (Sirajunisa & Panchanatham, 2010). Similar trend is observed in a study carried out by (Thakre, 2009) on life orientation and organizational role stress among retail employees. The result revealed that women retail employees were lower on role erosion stress than men retail employees. This could be because of men retail employees feel that their role functions are shared by other role within their role set. Whereas, enlarger females found to be higher on inter role distance stress because of different expectations (functions) of their organizational roles as sales person and familial roles as mother, sister, and daughter.In the present study, female employees of both print and non-print media who are married and have children did actually respondverbally that they have higher levels of stress. This could be stress associated to work or home or both together.

In another study source of high level stress is attributed to role overload (Bidlan & Sihag, 2013). Similarly, non-print media professionals who have a highly demanding schedule are likely to experience stress due to role overload. They are expected to work at odd hours extending into late-nights, to go for out station reporting on a short notice and likely to compromise on sleep and health due to inconsistent working hours. This could be a contributing factor for a non-print media professional experiencing higher organizational role stress.However, professionals in the print media have the options of flexi work hours and work from home, which could be the reason of lower stress among them. Thus, higher organizational role stress among non-print media professionals seems to the fact of erratic work hours, work demands and inability to spend adequate time with family members.

Satisfaction with Life

Hypothesis 2 of the study stated that 'there will be no significant difference between print and non-print media professionals on satisfaction with life', for testing this hypothesis t test was conducted. The mean scores obtained by print and non-print media professionals were compared by using *t*-test for the independent sample. The results of the descriptive statistics of the means, standard deviations and t-test for satisfaction with life are shown in Table 2.

Table 2: Mean, SD and t values for Satisfaction with Life

Media Type	*N*	*Mean*	*SD*	*t - Value*	*P*
Print media professionals	45	28.08	4.24	1.06	N.S.
Non-print media professionals	40	28.96	3.33		

It can be seen from Table-2, that the mean value (M=28.96) of non-print media professionals is slightly higher than mean value (M=28.08) of print media professionals on satisfaction with life. Analysis of data using t-test showed no significant difference between non-print media professionals and print media professionals on satisfaction with life, t (83) = 1.06, p > 0.00. This depicts no difference between non-print media professionals and print media professionals on satisfaction with life. Thus, hypothesis 2 is rejected.

Past research by Rice et al. (1992) revealed that the relationship between work and/ or non-work conflict and the perceived quality of life are insignificant. They state that there is no direct relationship between satisfaction with life and the roles (professional and personal) of an individual. On the contrary, a high level of satisfaction with life is indicative of lesser chances of turnover intention (Goetze, 2000). Features like job characteristics, job type, role clarity and work environment influence an employee's satisfaction levels and subsequent intention to leave the organization. In a recent study by Mas-Machuca, Berbegal-Mirabent&Alegre (2016) reported the importance of supervisory support, job satisfaction and job autonomy as antecedent factors leading to satisfaction with life. In the present study no difference on satisfaction with life among print and non-print media employee indicates the likelihood of absence of expected supervisory support, job autonomy and organizational pride.

Reflecting upon the results of this study, it can be said that the satisfaction level of professionals belonging to print and non-print media is almost the same. This could be due to reasons that can be drawn from the introspective observations, like a media professional said- "I know what I was getting myself into, and clearly communicated this to my wife before we got married. Support, communication and trust by your spouse plays vital roles for success in this field." It can be inferred from this statement that non-print media professionals are likely to be aware of their work schedules, commitment to work and priorities.

Work-Life Balance

Hypothesis 3 of the study stated that 'there will be no significant difference between print and non-print media professionals on work-life balance', for testing this hypothesis t test was conducted. The mean scores obtained by print and non-print media professionals were compared by using *t*-test for the independent sample. The results of the descriptive statistics of the means, standard deviations and t-test for work-life balance are shown in Table 3.

Table 3: Mean, SD and t values for Work-Life Balance

Media Type	*N*	*Mean*	*SD*	*t - Value*	*p*
Print media professionals	45	107.63	16.08	4.23*	0.00
Non-print media professionals	40	96	6.91		

* p< .05

It can be seen from Table-3, that the mean value (M=16.08) of print media professionals is higher than mean value (M=6.91) of non-print media professionals on work- life balance. Analysis of data using t-test showed significant difference between print media professionals and non-print media professionals on work-life balance, t (83) = 4.23, p > 0.00. This depicts that print media professional are higher on work-life balance than non-print media professionals. Thus, hypothesis 3 is accepted.

Jindal (2015) stated that media professionals find it hard to maintain a good balance between their work and family life. This seems to be related with work schedules such as, role overload, job pressures and job characteristics and personal attributes such as the need to maintain oneself physically, good presence of mind and ability to adapt to changes quickly. The difference in both groups seems to be due to the unplanned work schedules and unpredictable hours of work that have to be followed by non-print media professionals. Non-print media professionals have a round the clock job, that results to instant work demands and added responsibilities. An interesting research at the new media centre of Brighton & Hove it is observed that many media professionals belonging to the print sector have maintained a healthy work-life balance integrating the options of flexi work hours, paternity leave for males, options of day care centres at the organization, as well as options for recreational activities for the entire family sponsored by the organization (Perrons, 2001). However, professionals belonging to non-print sectors have been recorded to state that "life at home takes a back seat as work demands are such that one must be present at work, whenever we are required" (Perrons, 2001, p.25).

The social interaction evidently plays a vital role in maintaining balance at work and life as it affects both the work and family domain (Farivar, Cameron, &Yaghoubi, 2016). Thus, difference between media professionals from print and non-print sectors can be owed to factors like job demands, erratic work schedules and absence of health promoting initiatives from organizations and lack of social interaction. Family hours' discrepancy (FHD) and work hours' discrepancy (WHD) constructs were said to influence factors like organizational commitment, intention to leave, work stress and well-being (Odle-dusseau, Britt &Bobko, 2012).In the present study the inability of non-print media professionals to commit time at home due to professional constraints may consequently lead to a lower level of balance between work and life as compared to print media professionals.

According to Baral and Bhargava(2010), work-life enrichment is a direct result of supervisory support and job characteristics. The job characteristics includes components such as task identity, task significance, autonomy, feedback from others and skill variety. In the present study non-print media employees have a job profile that demands them to look presentable at all times, since most of them are news presenters and their work become monotonous for them after few years. The reason for low work-life balance could be monotony, lack of exhibition of various skills and lack of autonomy.A good source of support and satisfying job characteristics are likely to make an individual feel fulfilled at work, and applying the concept of work-family-enrichment here the individual then would naturally have a better family and work life.

CONCLUSION

The results indicate that print media professionals experience higher work-life balance and lower organizational role stress as compared to non-print media professionals. The reason of this difference could be that non-print media is a 24x7 demanding job, with erratic work hours and demands an individual to stay in touch with their work roles even when they are not at their workplace.

Implications

The study findings may be useful for HR professionals to evaluate the organizational causes of stress at different levels and develop strategies to reduce stress. To improve stress levels among the workforce of the organization strategies like job sharing, job splitting, job rotation can be useful. The work-life balance of employees can be enhanced by arranging flexible working hours and by introducing compressed work week and family leave policies. Satisfaction with life can be enriched by practising stronger supervisory support, introducing peer reviews, organising stress management programmes and employee assistance programmes.

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CLIMATE CHANGE PERCEPTION AND ADJUSTMENT AS THE PREDICTORS OF ACADEMIC ACHIEVEMENT

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ABSTRACT

Climate change is posing a big threat to mankind. It is an imbalance in physical environment, and this imbalance is causing lots of problems, for example, rise in temperature, melting of icebergs, shift in seasons, shortening of winter session and lengthening of summer season. In addition to problems in environment, it is posing a threat to human health, both physical and mental. Regarding mental health the term eco-anxiety is quite in acquaintance. Another issue is related to perception of climate change i.e., how we perceive change in climate – existential or threatful. Existential perception means climate change is seen as a natural process and will not pose any threat to living organisms or to the environment in any way. Threatful perception means thinking of climate change as threat to mankind, to physical environment, and physical and psychological health and consequently other aspects of human life including academic achievement. Adjustment also affects the academic achievement. The present piece of research focuses on how climate change perception and adjustment will predict academic achievement. Adjustment Inventory for School Students (Sinha and Singh, 1993) has been used to assess adjustment, Climate Change Perception Questionnaire (Tiwari and Singh, 2016) has been used to assess climate change perception and percentage (%) of marks obtained in last examination has been used for academic

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achievement. The results indicate that adjustment and climate change perception significantly predict academic achievement ($R^2 = 115$; $p < 0.01$).

Keywords: Academic achievement, adjustment, climate change perception, environment, mental health, Eco-anxiety

Academic achievement may be defined as "knowledge attaining ability or degree of competence in school tasks usually measured by standardized tests and expressed in a grade or units based on pupils' performance" (Trow, 1956) or the knowledge obtained or skills developed in the school subjects usually designed by test scores or marks assigned by the teacher (Good, 1959). Mehta (1969) defined academic achievement as "academic performance that includes both curricular and co-curricular performance of the students, it indicates the learning outcome of the students and in class rooms, students performs their potentials efficiently, as a result learning takes place". The learning outcome changes the behavior pattern of the student through different subjects.Academic achievement is a term used in school when a student does well in academics. They achieve or do well in an area of school and do well in their studies (Winfield 1990). A number of studies reported that there is strong positive association between psychological adjustment and academic achievement in students (Jacobson, 2012; Arnold, 1997; Dockett, Perry & Tracey, 1997; Margetts, 2002; Chen, 2010).

The word adjustment means that behavior that permits people to meet the demands of the environment. It is also defined as a response to stress and adjust. Life is a continuous series of change and challenges. Everyone is facing such situations for his survival or growth. Different psychologists and the leaders of educational thoughts defined the process of adjustment in different terms. The strategy used by the individual to manage this is called adjustment. Adjustment is the process of adaption to physical environment and adopting modes of behavior suitable to the environment as well as to social demands(Good, 1959), it is any operation and reaction chain going on between the individual and his environment whereby an organism or organ becomes more competent (Warren, 1934) and the process of finding and adopting modes of behavior suitable to the environment or the changes in the environment(Good, 1959). Kulshrestha (1979) explained that the adjustment process is a way in which the individual attempts to deal with stress, tensions, conflicts etc., and meet his or her needs. In this process, the individual also makes efforts to maintain harmonious relationships with the environment. All this is the total functioning of the person which is the result of equilibrium and that may be affected by demands-adjustment. The process of adjustment becomes either of the processes (Monroe, 1990) and the two crucial factors responsible for adjustment are: - the individual andsocial and/or physical environment.

Climate is the "average weather" in a place which includes patterns of temperature, precipitation (rain or snow), humidity, wind and seasons. Climate patterns play a fundamental role in shaping natural ecosystems, and the human economies and cultures that depend on them. But the climate we have is not what it used to be, it is rapidly changing with disruptive impacts, and that change is increasing with brisk pace than seen in the last 2,000 years. The rising levels of carbon dioxide and other heat-trapping gases in the atmosphere have warmed the Earth and are causing lethal impacts, including rising sea levels; melting snow and ice; more extreme heat events, fires and drought; and more extreme storms, rainfall and floods and it is expected that these trends will continue and in some cases speed up, posing threats to human health, forests, agriculture, freshwaters, coastlines, and other natural resources that are vital to the economy, environment, and quality of life.Public perceptions typically reflect much lower concern about climate change than is expressed by climate scientists, potentially owing, in part, to the public'slack of personal experience with climate impact (Weber, 2010) and psychological research explains that lack of concern about climate change may be the perception that it is an issue of distant future. Research based onconstrual-level theory of psychological distance (Trope&Liberman, 2003) indicates that people think about distant events more abstractly and proximal events more concretely (Liberman& Trope, 1998; Trope &Liberman, 2003).The dimensions of climate change perception proposed by Tiwari and Singhare – existential and threatful. Existential perception means being in ease, taking it as it is or perceiving climate change as an ongoing natural process whereas threatful perception means perceiving climate change as a threat to him/her, society and mankind (Tiwari & Singh, 2016).Perception of climate change as a threat across the world has been increasing over the years thanks to the severity and increased frequency of climate change impacts (Opschoor, 2008).Various studies show that people in developing countries are more likely toperceive climate change as a threat (Pew Research Centre, 2006; Godfrey et al., 2009). "Eco-anxiety" –a real reaction to changing climatic conditions wherein many people feel deeply helpless and fatalistic while watching the effects of climate change are disclosed and worrying about their families' future, andbecause the physical and psychological impacts of climate change are linked, communities with outdated infrastructure are often more vulnerable to the psychological impacts of climate change (Clayton, Manning& Hodge, 2014). Also, Norris et al. (2002) found relationship between natural disasters and mental health and psychological functioning.

Academic Achievement and Adjustment

Scholastic achievement level is associated with personal, social, emotional and educational adjustment(Abraham, 1974; &Somasundaram, 1980) and scholastic underachievement is significantly related with poor adjustment in social surroundings (Saxena,1979). Scholastic achievement of high achievers and low achievers differ significantly in their personal adjustment (Rao, 1970) and that mathematical achievement has a definite relation with personal adjustment among secondary school pupils(Abraham, 1974; &Iyer, 1977) but mathematical achievement of high school pupils is a negative correlate of social achievement(Shivappa, 1980; &Soman, 1977). Personal adjustment variables facilitate achievement in secondary school biology(Nair, 1983). It can be concluded that there is a significant positive relation between achievement in science and adjustment of students in secondary schools(Jha, 1970), also, there were significantly differences among the overachievers, average achiever and underachievers with regards to their adjustment in school, home and social domains. The overachievers were better adjusted than the underachievers in all their areas of adjustment (Sharma, 2007). Poduska (1980) concluded that adjustment is the ability to select appropriate and effective measures to meet the demands of the environment and climate change while maintaining a healthy attitude towards the circumstances. Psychological adjustment and academic achievement are positively linked(Larson & Richards, 1991; & Nair, 1983). Searle and Ward (1990) also conclude in same tune that there is positive significant relationship between psychological adjustment and academic achievement among secondary level passed students. Females show more psychological adjustment as compared to males (Arnold, 1997; & Searle and Ward, 1990). Jacobson (2012) said that there is significant difference between males and females on psychological adjustment among O' level passed students.Zakokolilo (1998) also shared that there exists a significant difference between males and females on psychological adjustment; moreover he also wrote that females showed more psychological adjustment as compared to males.

Academic Achievement andClimate Change Perception

The basic understanding of public perception on vulnerability, attitude and risk in relation to climate change and health will provide strategic direction for government policy, adaptation strategic and development of community based line. The most influential factor leading to understanding of climate change and its impact on health was education (Kabir, 2016) and people having good academic achievement had clear perceptions about change in heat, cold and rainfall that had occurred over last five to ten years(Haque et al., 2012).A study conducted by Ochieng and Koske(2013) reveals that primary school teachers in Kisumu Municipality perceive climate change as amajor threat.Differences regarding the perceptions of the impact of climate change variesbetween males and females, and among those who engage in climatesensitive livelihoods compared to those whose livelihoods were not sensitive(The Asia Foundation, 2012). Acute anddirect impacts include mental health injuries associatedwith more frequent and powerful weather events, naturaldisasters, and adjustment to degraded or disrupted physicalenvironments (Albrecht et al., 2007; Costello et al., 2009;Few, 2007; Page

& Howard, 2010). Indirect and vicariousimpacts include intense emotions associated with observationof climate change effects worldwide and anxiety anduncertainty about the unprecedented scale of current andfuture risks to humans and other species (Kidner, 2007; Maibach, Roser-Renouf, &Leiserowitz, 2009; Norgaard, 2009).In a study done by Al Buloshi, & Ramadan, (2015) stated that people who were high in academic achievement were the one who was able to cope up better during adaptation of climate change and mitigation.

Objective

To study whether adjustment and climate change perception will predict academic achievement.

Hypothesis

Climate change perception and adjustment will predict Academic achievement.

METHOD

Sample

A sample of one hundred and Sixty (N=160) students (girls and boys) between age-group of 16-19 years from KendriyaVidyalaya, Jaipur and BanasthaliVidyapith was be selected through convenience sampling.

Tools

The following three tools were used in the present study:

1. Adjustment Inventory for School Students, Sinha and Singh (1993)
2. Climate Change Perception Questionnaire, Tiwari and Singh (2016)
3. Academic Achievement was calculated on the basis of percentage (%) of marks obtained in last examination.

Procedure

All students from the respective schools were invited to participate. They were briefed on the study orally by a researcher in the classroom at the beginning of a lesson. Students were informed about the voluntary character of participation and the possibility to withdraw from the study at any time. The students were guaranteed anonymity. In addition to the oral briefing, all students obtained written information about the study. Additional assistance was provided in problems such as language barrier etc.

RESULT AND DISCUSSION

The aim of the present research was to study the effect of Climate Change Perception and adjustment onAcademic achievement. The collected data is calculated by different statistical techniques. It was hypothesized that Climate Change Perception and Adjustment will predictAcademic Achievement.In order to test this hypothesis, regression technique was employed.

Table 1: Regression for Independent Variables Adjustment and Academic achievement and dependent climate change.

R	*R Square*	*Adj. R Square*	*Std. Err of Est.*	*F*	*p-value*	*Variable*	*Standardized Coefficients Beta*	*p-value*
.340	.115*	.104	10.16	10.232	0.01	Adj.CCP.	.115-.280	.050.01

CCP-Climate Change Perception ; Adj.- Adjustment ; * $p < 0.01$

After carefully analyzing the results, (Table 1) it can be concluded that Climate Change Perception and Adjustment significantly predicted Academic Achievement scores, $\beta = .155 (p < 0.05)$. Adjustment also explained a significant proportion of variance in Academic achievement scores, R^2 explains relationship between dependent and independent variables here $R^2 = .115$, F (df:1,161) = 10.232 ($p < 0.01$)which shows variables have relationship. It explains that Adjustment variable is responsible for 11 percent of Academic Achievement (Standard error of estimate=10.16). Beta value of climate change perception is -.280 ($p < 0.01$)

However, it is also concluded that adjustment and climate change perception are predictors of Academic achievement. Hence, the hypothesis is accepted.

It can be ascertained that adjustment and climate change perception significantly predict academic achievement (R2= .115; $p < 0.01$). R^2 predicts the relationship between dependent and independent variables; from results it has been found that dependent and independent variables have relationship (Table 1). Whereas, β value explains the relationship of the variables which is positive between adjustment and academic achievement and negative between climate change perception and academic achievement. Two dimensions of climate perception on the same continuum – existential and threatful were considered. Existential perception means being in ease, taking it as it is or perceiving climate change as an ongoing natural process whereas threatful perception means perceiving climate change as a threat to him/her, society and mankind. As, there is negative correlation between Climate Change Perception and Academic Achievement which shows that if scores of Academic Achievement will increase then one's perception regarding climate change will be threatful. Or in other words we can say that perception of the climate change is existential if scores are low and score of Adjustment and Academic achievement also have positive relationship. The score of adjustment implies that if scores are high that shows the lack of adjustment and result suggested that positive correlation which shows that, if scores of adjustment will increase then academic achievement will increase, poor adjustment will lead to good academic achievement. In a study done and published by Nasir (2012), a significant difference was found in the academic performance of the students between high and low level of cultural adjustment and cultural adjustment was found to be a significant predictor of academic achievement of international students. In another study done by Mahmood and Iqbal (2015) emotional and behavioral problem of adjustment of students was found to be directly related to their academic achievement. In another study it has been found that there is low positive relationship between adjustment and academic achievement(YELLAIAH, 2012). Whereas, on other side various studies suggest that when climate change is perceived existential it enhances the Academic achievement and when climate change is perceived as threatful, it decrease the academic achievement. In a study by Yates (2001) an interesting difference was found in the student's academic achievement and perception of the school climate over time and across the grade levels. In another study by Tiyo, Edroma, and Orech-Meza (2015), in Africa, it was found thatsmall scale farmers were aware of climate event and they perceived it threatful due to having lack of academic achievement. So as the various studies suggest that adjustment and climate change perception predictor of our academic achievement and they predict our Academic achievement.

The present authors propose some suggestions for future researches in this area. Research can be conducted on a larger population. Demographic variables like age, ethnicity, occupation, etc can also be studied on a large level as this study undertook the age group of 16-19 years old school going male and female . As the present research was limited to only one state and two institutes, it can be exceeded to larger geographical area and to more institutions.

Implications

With increase of natural calamity life of human beings also get affected in great manner. This study gives briefinformation about how adjustment and perception regarding climate change will predict one's Academic Achievement. As result of this study have shown some new relations within the variables, this study is an eye opener toward the climate change awareness as people have lack of knowledge regarding climate change, they perceive it existential and take no safety measure no pre planning to deal with climate change and its cons, whereas on other hand they do adjust with whatever coming in a way due to having lack of knowledge which later on results as degradation in one's academic achievement. People should practice activities which is eco friendly and do not affect environment negatively. Awareness programs should be run to make people aware regarding environment and how they control natural calamity. In short this study is a contribution towards the changing era and its pros and cons in individual lives.

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SUBJECTIVE VITALITY IN RELATION TO HOPE AMONG ADOLESCENTS

Poonam Devi, NovRattan Sharma** and Deepti Hooda****

ABSTRACT

Subjective Vitality is an encouraging feeling of aliveness and force. It concern with specific psychological understanding of possessing keenness and strength and in another way hope is the perceived capability to derive pathways to desired goals, and motivate oneself via agency thinking to use those pathways. In modern world, researchers have shifted their focus on positive trait of personality. The current study attempts to study the relationship between subjective vitality and hope among adolescents. A sample of 200 adolescents (100 male adolescents and 100 female adolescents) studying in class eleventh and twelfth, belonging from rural area was taken for the present research. Subjective vitality scale and hope scale have been used as tools for data collection. To analyze data independent sample t-test and Pearson correlation have been used. Findings of the study showed non significant gender differences on subjective vitality and significant gender differences on hope. Correlational analysis showed positive correlation between subjective vitality and hope.

Keywords: Subjective Vitality, Hope, Adolescents.

Subjective vitality is an encouraging feeling of aliveness and force. It concerns with specific psychological understanding of possessing keenness and strength. Different people have different levels of vitality. Vitality is a function not only of physical influences but also psychological factors. Physical influences considered with state of illness and fatigue and psychological factors includes being in love, having a duty, being efficient. Subjective vitality can be defined as "one's conscious experience of possessing energy and aliveness, a general theory for life". Vitality engaged to describe manifest enthusiasm and energy. Vitality is applied to those who appear spirited, passionate, and spontaneous. Persons with higher subjective vitality report higher level of attentiveness, vigilant, energized, and crucial.

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There is a close connection stuck between mental health and liveliness. Freud's 'economic viewpoint' suggests that each person has a inadequate amount of psychic energy resulting from Eros, the life drives, the more that people are free to subjugation the conflict and therefore have access to conflict free energy derived from Eros, the more they will manifest vitality, resourcefulness, and liveliness. This concept is called by many names. The Taoist culture of ancient China refer to chi and as the sentiment of being full of internal energy, while the ancient Japanese refer to 'ki' as the energy and power which is used to assemble mental and physical health.. Ryan and Frederick (1997) further describe vitality as "energy that is perceived to emanate from the self". Vitality is a feeling of energy from an inside source and not from specific threats in the environment."Vigor" word is also used for this term.

Subjective vitality is a positive experience because it emanates from intrinsically motivated behavior as conceptualized within self-determination theory. Vitality emanates from an internal locus of causality, that is the perception of that event or actions are a true expression of individual's self. Vitality reflects autonomous behavior that actualizes and enhances one's self rather than effortful behavior that might be experienced as detracting from one's ability to behave in an autonomous way (Ryan & Frederick, 1997).Subjective vitality is different from intrinsic motivation that is operationalized by as a set of reasons for which individual enact a behavior; vitality falls within the category of motivational consequences of an affective nature that is distinct from the reasons for which individuals enacts a behavior .Emotional well being, social well being, psychological well being, satisfaction with life, and subjective happiness are found associated with subjective vitality. Subjective vitality is unenthusiastically related to depressive symptoms and nervousness. Studies point out that psychological well-being, life skills, and life satisfaction are correspondingly the best predictors of subjective vitality.

Subjective vitality is predisposed by somatic factors. Healthy organism seems to show more vitality. Evidences suggest that when bodily functions are healthy and capable to be efficiently exercised they moves individual towards vitality. In contrast, somatic factors that exhaust one's existing liveliness or block effectual functioning should be linked with diminished subjective vitality. Life stressors that threat to one's sovereignty or reflectance are projected to harmfully influence subjective vitality. Subjective vitality is influenced by physical challenges, damage, or illness; their impact may be tempered by the sense or purposeful significance of such challenges with admiration to the person. Headaches, cold symptoms, and other interferences with most favorable functioning are also related to diminish in felt energy.

Subjective vitality focuses on current positive feeling of individual. It is also helpful in directing future pathways and achieving goals. Hope can be defined as goal directed view in which the individual utilizes pathway thinking (the mandatory motivations to apply those routes).Snyder et al.(1989) conceptualized hope" as a human strength manifested in capacities to (a) clearly conceptualized goals (goal thinking), (b) develop the specific strategies to reach those goals (pathway thinking), and (c) initiate and sustain the motivation for using those strategies (agency thinking)."Goal thinking is ever-present in youth, but often uncultivated and unprocessed. Goals which have substantial value to the individual are considered pertinent to hope. Goals can be short term or long term. Goal can be everything that human being longing to experience, produce, obtain, do or become. Persons who have high level of hope repeatedly favor "stretch goals" that is somewhat more complicated than pervious attained goals. And further to extend substitute pathways, particularly when the goals are main and when obstacles come into view.

Pathway thinking is associated with the construction of alternate routes when original ones are blocked (Snyder, Harris., Anderson, Holleran, Irving, Simon(1991)).Both pathway and agency thinking are essential, but neither by itself is enough to maintain flourishing goal pursuit. Pathway and agency idea are preservative, mutual, and absolutely connected, but they are not identical. High hope people encourage themselves to obtain the next footstep or to take a long assortment goal and separate it into steps than the low hope people. High hope individuals have positive affecting sets and a wisdom of keenness that stems from their histories of achievement in goal pursuits. Individuals who have low hope are found associated with negative sets and a sense of emotional flatness that stems from their histories of having disastrous in goal pursuits.

Stressors are perceived by different people in a different way. Stressor is interpreted in a different way depending on person's level of hope. Individuals with high hope take such type of barriers as challenges and will search for alternative routes and relate their motivations to those routes. High hope person acknowledge accomplishment of working around such blockages, and propelled forward by their positive emotions. The low hoper becomes trapped because they cannot find alternate routes.Hope theory does not emphasis on that once a goal is established, it must always be met. Continued evaluation of goal is possible. Agency and pathway may continue to flow through the event sequences to reassess if the goal is worth pursuing. Hope is formulated by agency, pathways, and re-evaluation process which is a cognitive set regarding the future. High hope represents the use of pathways and agency, and an individual that will be able to meet her/ his goals. Hope will enable a person to persist in the face of obstacles until she/he reach her/his goal.

Hope is not just a mental condition; it has electrochemical links that play an important part in functioning of the immune system and, undeniably the complete economy of the whole human organism. Goal directed procedures are keeping up by the Behavioral Activation System(BAS) and Behavioral Inhibition System(BIS).The BIS is considered to be approachable to punishment, and it signals the organism to stop, whereas the BAS is governed by rewards, and it propel the message to go onward.Snyder (1994, 2000) has proposed that strong attachment to caregivers is essential for imparting hope.Trumatic events at childhood are also linked to lessening of hope. Hope scores can predict outcomes in academics, sports, physical health, adjustment, and psychotherapy. Hope scores is also related to happiness, positive emotions, getting along with others, etc.

Subjective vitality is positive feeling of aliveness from the view point of individual and hope is a goal directed view in which the individual utilize pathway thinking. Subjective vitality concerns with the present feeling and pathway concern with the future directions.

Objectives

1. To assess and compare the Subjective Vitality in male and female adolescents.
2. To assess and compare the Hope in male and female adolescents.
3. To examine the relationship between the Subjective Vitality and Hope in adolelescents.

Hypotheses

1. There would be no significant differences in Subjective Vitality of male and female adolescents.
2. There would be no significant differences in Hope of male and female adolescents.
3. There would be significant positive relationship between Subjective Vitality and Hope of adolescents.

METHOD

Design: A correlation design was used in the present investigation to explore the relationship between subjective vitality and hope. However, to compare male and female adolescents two group design was used.

Sample: A sample of 200 adolescents (100 male and 100 female) was selected on the basis of availability from the rural background. Participants were the students of eleventh and twelfth class students belonged to an age of 15 to 18.

Tools: The following tools were used to collect the data:

i) ***Subjective Vitality Scale:*** Subjective Vitality Scale was developed by Ryan & Frederick (1997). It contain 7 items and each item has 7 point scale. (1=not true at all, 7=very true). Scores can range from 7 to 49. The internal consistency of this test was.84. Result of the confirmatory factor analysis indicated that the model was well fitted (RMSEA=.047, NFI=.99, CFI=1.00, IFI=1.00, RFI=1.00, GFI=.99 and AGFI=.96).Item analysis of this scale showed that one item in this scale can be left otherwise negative scoring of this item can be done. This scale was also adapted to Turkish by Uysal, Saricam and Akin (2014).The Cranach alpha of the Turkish was .84.

ii) ***Hope Scale:*** Hope Scale was developed by Snyder, Anderson, Holleran, Irving, Sigmon (1991) it has 12 items. Four items in the scale are distracter. Four item represent agency subscale, and other four items represents pathway, that are called pathway items. Response on this scale can be given at eight point scale, in which 1=definitely false, and 8=definitely true. Scores on the scale can range from 8 to 64.This scale also has internal consistency. Alpha range of these scale is.80.Psychometric properties of this scale shows that when factor analysis of the scale was done it shows that four items represents another factor. This scale has construct and discriminant validity also. State Hope Scale was another version of this scale. Items in this scale are designed in such a way that they can measure the individual's thinking of that moment.

Procedure: After establishing appropriate rapport with the students, informed consent was obtained.The purpose of the present investigation was explained to the students. Subjective vitality scale and hope scale were given to the students and instructions was made clear to them.After the instructions, participants started to do their work. When participants completed all the questions, researcher took the performs beck to them and checked out that all the statement were responded appropriately by the participant. After the data was collected, scoring of all the tests was done according to manual and data was analyzed by using SPSS software.

RESULTS AND DISCUSSION

The first objective of the present investigation was to assess and compare the subjective vitality of male and female adolescents. It was hypothesized that there would be no significant differences in male and female on subjective vitality. Subjective vitality is a kind of positive energy that forces a man to move towards positive acts. In order to test the hypothesis data was collected, and analyzed by SPSS, 16.0. Results of the present investigation are shown in the Table1.

Table 1: Significance of Mean differences between Male and Female Adolescents on Subjective Vitality.

Variable	*Gender*	*Mean*	*Std. Deviation*	*t-value*
Subjective Vitality	Female	34.49	5.84	1.02(NS)
	Male	33.59	6.54	

NS=Non Significant

Above table shows the mean value and t value of male and female adolescents on subjective vitality. Mean value of female on subjective vitality is 34.49. Value of male on subjective vitality is 33.59.Results of the present investigation shows that males mean on the category of subjective vitality is lower than the mean value of females. Above table shows that independent t- value between the two groups is 1.02 that is non- significant. It indicates that there is not significant mean difference between the group of male and female on this category. It may be because of their different perception of energy in life. Results shows that subjective vitality is found more in females than males and their mean value difference is not significant, it indicates that mean value difference between them is may be by chance.

The first objective of the present investigation was to assess and compare the Subjective Vitality of male and female adolescents. It was hypothesized that there would be no significant differences in male and female adolescents on subjective vitality. Results showed that female use more subjective vitality than males. It means they are free of conflicts, unburdened by external control, free from anxiety. Health maintaining behavior enhance the subjective vitality ,but those factors which pay their contribution in reducing health ,can also reduce subjective vitality. The results of the present investigation exemplified that there is no significant difference between the use of subjective vitality between male and female. So the first objective of the study is achieved and hypothesis stating there is no significant difference between male and female on subjective vitality is accepted.

The second objective of the present investigation was to assess and compare the hope of male and female adolescents. It was hypothesized that there would be no significant differences in the hope of male and female adolescents. Hope is a kind of expected behavior that desirable goal will be achieved. To test this hypothesis Adult Hope Scale was used. Hope results of male and female participants was depicted in the Table-2

Table-2: Significance of Mean differences between Male and Female Adolescents on Hope.

Variable	*Gender*	*Mean*	*Std. Deviation*	*t-value*
Agency Hope	Female	24.17	2.83	2.03*
	Male	25.25	4.52	
Pathway Hope	Female	23.42	3.51	4.24**
	Male	25.86	4.55	
Total Hope	Female	47.57	5.71	4.08**
	Male	51.28	7.09	

** p<.01 level *p< .05 level

Above table shows the mean value of male and female adolescents on hope. Value of female on agency hope is 24.17. Value of male on agency hope is 25.25.Results of the present investigation shows that males mean on the category of agency hope is higher than the mean value of females. Above table shows that standard deviation value of female on agency hope. Standard deviation value of female on hope is 2.83.Standard deviation value of male on agency hope is 4.52. Result shows that standard deviation value of female is lower than males.

Mean score of female participants on pathway hope is 23.42 while the mean score of male participants is 25.86.Results of the present investigation shows that means of male on the category of pathway hope is higher than the female. Standard deviation value of female on pathway hope is 3.51.Standard deviation value of male on agency pathway hope is 4.55. Result shows that standard deviation value of females is lower than males. Value of female mean on total hope is 47.57. Value of male mean on total hope is 51.28.Results of the present investigation shows that males mean on the category of total hope is higher than the mean value of females. Standard deviation value of female on total hope is 5.71.Standard deviation value of male on agency total hope is 7.09. Result shows that standard deviation value of males is higher than females. It means males feel themselves more able than females that they can attained the desirable goal by using different ways and by solving the problems.

Above table shows that independent t- value between the two groups on agency hope is 2.03 that are significant. It indicates that there is significant mean difference between the group of male and female on this category. Results depicts that male use more agency hope in their life than females. Independent t- value between the two groups on pathway hope is 4.24 that are significant. It indicates that there is significant mean difference between the group of male and female on pathway category. Results depicts that male use more pathway hope in their life than females. They keen to use different pathways to achieve that goal. On the total hope t value is 4.08 that are significant. It revealed that males are significantly different on hope than female.

The second objective of the present investigation was to assess and compare the hope of male and female adolescents. It was hypothesized that there would be no significant differences in the use of hope between male and female. Result of the investigation shows that male have more hope than female participants. On the category of agency hope male mean is high that shows that male use more agency hope in their life .Mean difference between them indicate that male and female use hope differently in their life because there mean difference is significant. On the category of pathway hope mean value of male is again higher than female it shows men use both, agency and pathway hope more than the women. They make coordination between the two categories, they make path to achieve the target and tried their best to use these pathways than females. On total hope mean value of males is also higher than females. Mean difference between the two groups is significant, it means in the use of humor male and female has difference. Thus results of the present study revealed that male are higher in using hope and also has significantly different than females.

Heaven and Ciarrochi (2008) studied the impact of perceived parental styles and gender on the development of hope and self-esteem .The study was conducted on 884 high school children for four years (grade 7, grade 8, grade 9, and grade 10). Result of study showed that females turned down more speedily in hope and self-esteem than boys. In the grade 7girls had more hope, but lower hope by grade 10.Result illustrated that in family parenting style and gender implicated no significant effect.

Result of Heaven and Ciarrochi (2008) study is also supporting the result of present study. According to the results of the study second objective of the study is achieved and hypothesis stating there would be no significant differences in the hope of male and female adolescents is rejected.

The third objective of the study was to examine the correlation between subjective vitality and hope. It was hypothesized that subjective vitality is significantly positive correlated with hope.Table-3 showing the results of correlation between subjective vitality and hope.

Table 3: Inter Correlation between Subjective Vitality and Hope

	Agency Hope	*Pathway Hope*	*Total Hope*
Subjective Vitality		.243**	209** 272**

** p< .01 level *p<05 level

Result of the study shows that subjective vitality is positively and significantly associated with agency hope and value of correlation is .243.Subjectively vitality is positively linked with pathway hope and value of correlation is .209 that is also significant at .01 level. Subjective vitality is positively correlated with total hope. Result table shows that value of correlation is 272.It indicates that subjective vitality is positively and significantly correlated with hope. Some other studies about the hope and optimism (which is a tendency to look on the more favorable side of events or conditions and to expect the more favorable outcome) also revealed the role of positivity on hope. Rand (2009) examined the unique and common influences of hope and optimism on grade expectancy and academic performance in 312 students who completed the course. The results of the study revealed that hope uniquely influenced students' grade expectancies, whereas optimism did not. In turn, grade expectancies influenced academic performance. Neither hope nor optimism had a unique, direct influence on academic performance. In contrast, the shared aspect of hope and optimism (i.e., goal attitude) had a direct influence on academic performance. In another study, Sood & Bakshi (2015)examined the relationship between Psychological capital and subjective vitality and contribution of psychological capital in rising subjective vitality. The data was collected randomly from 200 bank employees in Jammu. Psychological Capital Questionnaire and Subjective Vitality Scale were used for data collection. Results of the study pointed out a significant and positive relationship between all the dimensions of psychological capital namely efficacy, hope, optimism, resilience, and subjective vitality. Results also revealed that there has been significant contribution of each dimension of psychological capital in development of subjective vitality.This study is also confirmed the results of present study.In such way third objective is achieved and hypothesis stating that there would be significant positive relationship between subjective vitality and hope is confirmed.

Conclusion: Subjective vitality is positively associated with hope. It means individual full of positive energy also makes hope in their life. Individual with subjective vitality makes their pathway and follow these pathway to achieve their goal.

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COMPARATIVE ASSESSMENT OF SUBJECTIVE WELL-BEING AMONGST PUBLIC AND PRIVATE SECTOR BANK EMPLOYEES

*Devina Sharma*and Uma Joshi***

ABSTRACT

This study investigates subjective well-being (SWB) of employees of banks (public and private sector banks both). The sample of the study comprised of 200 public sector bank employees and 200 private bank employees. These employees were officers and middle level managers from 4 public and 4 private banks each. They were of the age 25-40 years from four cities of North India. They had an experience of minimum five years. The sampling technique used was convenience sampling. It was observed that the SWB of public sector banks was better than private sector banks covering areas of emotional/psychological well-being (happiness, interest and satisfaction in life along with social growth/acceptance, autonomy, socializing and personal growth).

Key Words: Subjective Well-Being, Public banks and Private sector banks

Now-a-days, there is a race where people struggle to be in competition and win. The organizations have to pace up with the world where rapid technological changes occur and are explored from time to time. SWB of the employees is important as it makes good citizens at workplace making them live longer and even making more money. SWB is important for banks as it reduces absenteeism (Peterson, Luthans, Avolio, Walumbwa & Zhang, 2011) enhances job performance (Peterson, Luthans, Avolio, Walumbwa & Zhang, 2011) improves the productivity (Harter, Schmidt, Asplund, Killham & Agrawal, 2010) and creativity (Amabile, Barsade, Mueller & Staw, 2005; George & Zhou, 2007).

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There are two main benefactors of any contract of commerce or trade. The employer (the organization) and the employees (the work force) who work in collaboration at a common platform for a common goal, nevertheless, their focus is in two different domains. The organization (the employer) is concerned about the performance of its employees where as the employees are concerned about their SWB (happiness and life satisfaction) and level of satisfaction. Employers make all the efforts to enhance performance and maximize outcome in terms of production. Similarly, employees of any organization expect health, wealth and happiness by the end of the day. There are complex behavioural dynamics between these two domains, at the level of organization and at the level of employees. If organizations expect peak performance by their employees, the employees expect conducive and promotive work culture to work in. It is a challenge for any organization and its employees to create a synergy between these two domains and merge them into a common mutually beneficial system. Therefore, the present study explores SWB of the public and private bank employees.

The public and private bank employees were taken as sample of the present study. The public banks were taken in this research because more than 50% of share capital is held by the government (Public Banks). The private banks were taken in the present research because major part of the stakes is held by private shareholders. They are registered with companies having limited liability. Since, both types of banks work independently, as well as interdependently under different work demands and work ethics and are governed by different bodies, it will be interesting as well as beneficial, to study and compare these two types of banks (private and public) in terms of SWB.

The concept of SWB is of radical importance to behavioral sciences. It evaluates life's quality and at the same time it assesses the quality of society (Jain, 2014). Although philosophers most often have difference of opinion, on description of the term happiness, but here they agree that good life is happy. So, it can be said that SWB holds merit in good life and for a good society as well, but that's not all (Jain, 2014). High SWB is indicator of future health and quality of social life of people (Lyubomirsky, King & Diener, 2005). Happy people are more likely to be popular and likeable (Boehm & Lyubomirsky, 2008). A depressive culture amongst society members cannot make an ideal society (Jain, 2014). Similarly, a depressive work culture in banks amongst employees would lead to lack of SWB.

SWB is important for banks as it reduces absenteeism (Peterson, Luthans, Avolio, Walumbwa & Zhang, 2011), enhances job performance (Peterson, Luthans, Avolio, Walumbwa & Zhang, 2011) improves the productivity (Harter, Schmidt, Asplund, Killham & Agrawal, 2010) and creativity (Amabile, Barsade, Mueller & Staw, 2005; George & Zhou, 2007). Ultimately, SWB is also affected and its significance can be observed in banks. This study would assist the management of private banks and the public banks and their governing bodies in enhancing SWB. Studies on SWB were namely, Clark, 1999; Diener, Oishi & Lucas, 2003; Stevenson & Wolfers, 2008; Diener & Chan, 2011; Vijaya & Manjula, 2012; Ogunyemi & Awoyele, 2014. Psychological well-being was reported higher in public banks, as compared to private banks (Alam & Rizvi, 2012). So, the study favoured public banks, as compared to private banks and psychological well-being is a determinant of SWB.

Objective: The aim for the present research was to explore and compare SWB of the employees of public and private banks.

METHOD

Design: The current study compares SWB of the public and private sector bank employees. Sample was 400 employees (both officers and middle level managers). Design of study was quasi-experimental study (ex post facto study) and Student's t-test was applied ($p<0.01$). SPSS version 20 was used.

Sample: Convenience sampling was the sampling technique used. N was 400 (200 officers and middle level managers each from 4 public and 4 private banks from 4 cities). 4 cities were Agra, Lucknow, Kanpur and Delhi. 4 public banks were Bank of Baroda, Bank of India, Punjab National Bank and State Bank of India and Axis bank, HDFC Bank, ICICI Bank and ING Vysya Bank were the 4 private banks. Employees had a minimum of five years experience.

Tools: The following tool was used in the current study:-

i) ***Mental Health Continuum Short Form (MHC-SF by Keyes 2009):*** The scale shows excellent internal consistency (> .80) and discriminant validity. The four week test-retest reliability estimates ranging from .57 for the altogether psychological well-being domain, .64 for the overall emotional well-being domain, to .71 for the overall social well-being domain (Keyes, 2009).

Procedure: The procedure followed for the study was as follows, the employees of the banks were contacted personally. Two weeks were being given to all of them to fill the questionnaires. Confidentiality of the responses was ensured. Doubts of the respondents, if any, were cleared.

RESULT AND DISCUSSION

The Statistical technique used to test the hypothesis was t-test. SPSS Version 20 was used for analysing the collected data. The table 1, depicts the mean values of SWB (and its components), which were 47.88 (in public bank) and 35.47 (in private banks).

Comparison of SWB of public and private banks

Table 1: Means, SD, t and p values of SWB and its components

Scale-Subjective Well-Being and its components	Public banks N=200		Private banks N=200		t-value	p value
	Mean	SD	Mean	SD		
Emotional Well-Being (EWB)	9.51	4.06	6.84	3.43	7.07	0.000
Social Well-Being	17.12	4.87	13.02	4.91	8.36	0.000
Psychological Well-Being (PWB)	21.28	5.36	15.60	5.67	10.29	0.000
Total of Subjective Well-Being	47.88	12.03	35.47	11.33	10.62	0.000

SWB is important in everyday life of people. It is important to be satisfied, interested and happy with one's job and life. It was observed that the employees of public banks revealed a higher degree of SWB as compared with private bank employees. Similar results (as of the current study), were found on psychological well-being by Alam & Rizvi (2012) where psychological well-being was high in public as compared to private banks.

Also 'happiness' a determinant of SWB, was researched by Stevenson & Wolfers (2008) in their study, where results were that happiness and per-capita income were positively correlated for the cross-section of countries, despite the declining rate of happiness in U.S.

The reasons why public banks revealed high SWB, than private banks could be attitude (Diener, Oishi & Lucas, 2003) and income (Clark, 1999) of an employee influencing SWB. Here, it can observed that private bank employees are better paid as compared to public bank employees, but still SWB was high amongst public bank employees. We can also draw our attention to the fact that 'pension' is given to public rather than private bank employees. Not many studies are conducted upon SWB and thus, to study SWB becomes all the more significant. Happy the person better is his/her health (Lyubomirsky, King & Diener, 2005; Cohen & Pressman, 2006; Howell, Kern & Lyubomirsky, 2007; Chida & Steptoe, 2008; Diener & Chan, 2011). Cohen, Doyle, Turner, Alper & Skoner, (2003) researched that positive feelings were linked with stronger immune system responses to infection. Positive emotions were associated with healthier levels of heart rate variations (Bhattacharyya, Whitehead, Rakhit & Steptoe, 2008). The endocrine system and immune system (also, the cardiovascular system) was harmed due to negative feelings/nature and positive ones prove to be a boost for them (Edwards & Cooper, 1988; Kiecolt-Glaser, McGuire, Robles & Glaser, 2002). SWB also, pulls down the heart rates in heart disease, in senior citizens (Ostir, Markides, Peek & Goodwin, 2001). Positivity was linked with lower stroke rates in seniors (Ostir, Markides, Peek & Goodwin, 2001). In an injury, stress was an obstacle, in the way of healing a wound (Christian, Graham, Padgett, Glaser & Kiecolt-Glaser, 2006). Other researches on SWB like that of Diener & Chan (2011) revealed that SWB affected health. Happy people lead a healthy life by following a healthy diet of fruits and vegetables and by exercising (Pettay, 2008; Blanchflower, Oswald & Stewart-Brown, 2013). Mentally disturbed people exposed to stress, were more likely to smoke (Ashton & Stepney, 1982). People of unpleasant emotions, tend to eat tasty unhealthy foods of fat (Garg, Wansink & Inman, 2007). Talking in biological terms, a study revealed adolescents who were stressed were more prone to be obese (Kubzansky, Gilthorpe & Goodman, 2012). Diener, Oishi & Lucas (2003) revealed results that personality (neuroticism, self-esteem and extraversion) affected SWB. Life situations also affected SWB in the long run. SWB is the happiness in one's life. It is the feeling of a person to be interested and satisfied in feelings and in real life.

Through careful analysis and observation, it can be concluded that there was a room for improvement in private banks. Government of India with RBI can take steps in this direction to improve the SWB of employees of private banks. The churn rate of private and public bank employees could be considered while understanding the behaviour of bank employees. By improving work culture, job performance/satisfaction and taking care of ergonomics, pro-activity and stress, the SWB of bank employees, could be improved in any organization. Further, the factors like emotional well-being (happiness, satisfaction, interest in life), social growth/contribution/integration/coherence/acceptance, organizational commitment/performance, big five personality traits (openness to experience, conscientiousness, extraversion, agreeableness and neuroticism), self acceptance, autonomy, aims in life, positive inter-personal relationships and personal growth could be considered for improving SWB in private sector banks. Though in private banks there are many facilities in terms of modern equipment or IT facilities, still the SWB is low. The working hours are long enough in private banks and even work at odd hours. For humanity sake, this should be considered, although, for the long/odd working hours employees are paid. Brainstorming (at public and private level) to improve the private policies of private banks could be worked out. Private sector banks need to work on building trust, loyalty, commitment and long term involvement with the organization.

On the whole, public banks proved significantly better in their SWB. It further raises serious questions on the working ethos of private banks, their policies related to employees' health vis-à-vis SWB.

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EFFECT OF YOGA PRACTICES ON WELLBEING

*Punam Devi Bagi**

ABSTRACT

The main aim of yoga is to harmonize the body, mind and soul which exhibit a good personality. Yoga is an intangible force which question on its objective. Yoga is a fantastic remedy for overcoming problems that a modern man is facing in its daily life. The present study was a comparative study of general wellbeing among yoga practitioners and non- yoga practitioners. Review of literature demonstrates that so many factors are associated with general wellbeing. Therefore; present investigation was designed to study the effect of yoga practice on wellbeing. A sample of 80 participants (male and female) was chosen from Karnal and Kurukshetra district of Haryana,with mean age of 38. 40 volunteers who participated in the practice of yoga over a period of 4 months and 40 who were not doing yoga were assessed on general Well-being Inventory by Santosh, K.,Verma and Amita Verma(1986). Data was analyzed by using Independent t-test. The results of the study showed that yoga practitioners have significantly higher wellbeing. The paper thus, reiterates the beneficial effects of regular practice of yoga on general wellbeing.

Keywords: Yoga and Wellbeing.

Yoga is an important branch of Indian Philosophy which was originally developed by an Indian sage *Patanjali* who lived in 400 B.C. '*Patanjala yoga sutra'* by sage *Patanjali,* is the earliest written record of yoga and one of the oldest text in existence. *Patanjali's 'Astanga yoga'* consists of eight components namely *Yama, Niyama, Asana, Pranayama, Prathyahara, Dharana, Dhyana* and *Samadhi*. Although the system was initially developed to help the practitioner to attain spiritual goals, some of the components of yoga like *asana* (posture), *pranayama* (breathing) and *dhyana* (meditation) can be very effectively used to provide relief from several physical and psychological symptoms associated with chronic human diseases and also to provide good health, strength, balance, vitality

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and clarity of mind, all of which help to enhance the quality of life, at all stages of human life.

Yoga has no specific religion connotations its appeal is universal and is practiced by many. Yoga provides the health benefits of physical exercise. It promotes relaxation and emotional control. Yoga provides structured social opportunities. In 1980's yoga becomes popular system of physical exercise across the western world, but yoga in Indian traditions is more than physical exercise, it has a meditation and spiritual core with the ultimate goal in *moksha* or liberation. Regular practice of yoga promotes strength, endurance, flexibility and facilitates characteristics of friendliness, compassion, and greater self-control, while cultivating a sense of calmness and well-being. Yoga in its original form consists of a system of ethical, psychological and physical practices; although of ancient origin, it transcends cultures and languages. A meta-analysis study found that yoga based intervention produced substantial and highly significant reductions in smoking, alcohol consumption, and illicit drug use (Alexander, Robinson, & Rainforth, 1994). Malathi et al, 2000 found that regular yoga practice improve subjective wellbeing. Yoga is one of the methods by which a goal of positive mental health can be achieved (Verma, 1984)

Wellbeing the terminology denotes the physical, mental and social health of the individual in their respective society. Wellbeing may be characterized as the subjective feeling of contentment, happiness, satisfaction with life experience. And one's role in the modern world of works, sense of achievement, belongingness and no distress, dissatisfaction or worry. WHO (2001) has proposed that mental health is a state of wellbeing in which the individual realizes his or her own abilities, can works with the normal stress of life, can work productively and is able to make a contribution to community. Anger (2008,2010,2011) stated that even the philosophical literature refers to the simple notion of wellbeing(i.e. 'a life going well') in a variety of ways including a person's good, benefit, advantages, interest, prudential values, welfare , happiness, flourishing, utility quality of life and thriving(e.g. Seed house,1995:65). Shin and Johnson (1978) have defined wellbeing form of happiness as "a global assessment of a person's quality of life. Hafner-Holter etal (2009) found the significant improvement in physical and emotional wellbeing. Lucia, Danielle (2014) *found* yoga participants experience higher levels of perceived wellness than non-Yoga participants. Sharma, Gupta and Bijlani (2008) suggested that a short lifestyle modification and stress management education program lead to remarkable improvement in the subjective wellbeing scores of the subjects and can therefore make an appreciable contribution to primary prevention as well as management of lifestyle diseases. Jadhav and Havalappanavar (2009) results revealed a significant decrease in both state and trait anxiety levels and positive change in the subjective wellbeing of the students.Kamakhya (2004) noticed remarkable positive change in P.G. yoga student's anxiety and subjective wellbeing after practice of yoga *nidra* daily, half an hour for months.

The review of literature indicates that happiness, quality of life wellbeing directly related with peaceful mind .In India, a limited number of research work have been reported in the area of well-being. Taking this perspective in mind, the present investigation is a further attempt to find out whether yoga practice has any effect on wellbeing.

Objective: To studies the effect of regular yoga practice on wellbeing.

Hypothesis: There would be significant difference on wellbeing between yoga practitioners and non-yoga practitioners.

METHOD

Design: A two group design was adopted in the present study. Group I comprised respondents who were practicing Yoga and group II consisted of respondents who were not practicing Yoga.

Sample: The study was carried out among 80 adults. The sample consisted of yoga participants (n=40) and non- yoga participants of 30 to 40 years of age and they were selected purposively from *Karnal* and *Kurukshetra* district of Haryana. Subjects doing *yog abhyas* daily for a period of one hour for five days in a week under the trained yoga instructor's supervision of *Bharatiya Yog Sansthan*.

Tool:

i) ***PGI General Wellbeing Scale:*** PGI General Wellbeing measure by Verma and Verma (1986) was used to assess the wellbeing of the subject. This scale consists of 20 items. The scoring was easy-just counting the number of ticks right with scores ranging from 0 to 20. Numbers of ticks is counted and constitute the wellbeing score. The scale showed good inter-rater (.86, $p<.o1$) and inter-scorer (1.0, $p<.01$) reliabilities (Moudgil etal 1986).Test-retest reliability was .91 for the English version and .86 for the Hindi version (Moudgil et al.1986).

ii) **Yogic Practices**: The detail of yogic practices is as follows

Table 1: List of yogic practice

1. suksham abhyash	8. dhanuraasan
2. ashwathan aasan	9. makar aasan
3. tri-kon aasan	10. salabh aasan
4. ardhchandakar aasan	11. sav aasan
5. manduk aasan	12. anulom vilom
6. tadasan	13. kapalbhati
7. ushth aasan	14. ujjai
8. surya namaskar	15. bharamri
9. Go muckh aasan	16. om chanting etc.

iii) **Procedure:** All the subjects were informed about the purpose of the research, rapport was established with each of the subjects and all the doubts regarding the study were assured that the information would be kept confidential and used only for academic purpose. The subjects who were willing to participate only considered in this study. First of all rapport was established individually and proper instructions were given to them.PGI General Wellbeing scale was individually administered to each respondents. After a formal introduction, the scale was filled by them, and the dully filled scale was collected with a word of thanks for their support. Scoring and data analysis was done. Descriptive statistics and t-test was used for the analysis of data.

RESULTS AND DISCUSSION

The present study was intended to investigate the comparison between yoga participants and non-yoga participants on wellbeing. To achieve this aim, obtained data was analyzed by using simple t-test for the significance of difference. The mean scores, standard deviations and t-value of two groups on wellbeing have been depicted in table no.2. It is observed from the above table that the scores of wellbeing are significantly higher among yoga practitioners than non-yoga practitioners. That indicates that yoga practitioners have significantly higher wellbeing than non-yoga practitioners. Higher mean score on wellbeing of yoga practitioners shows that they are more able to monitor their wellness. Hence hypotheses 'there is a significant difference on wellbeing between yoga practitioners and non-yoga practitioners has been accepted.

Table 2: Mean comparison of wellbeing on the bases of yoga practice and non-yoga practice

Groups	*N*	*Mean*	*Std. Deviation*	*Std. Error Mean*	*t-value*
Yoga Non-yoga	40	16.47	4.20005	.66409	5.08**
		40	11.65	4.28204	.67705

**significant at 0.01 level

Health and wellbeing in true sense are dynamic processes of establishing equilibrium in the state of flux, it has been concluded that yoga process plays a significant role in the psychological management of wellbeing. Subjects practicing yoga were calm, cheerful, considerable and courageous in all dealings. Also the study suggests that the practice of yoga is strongest foundation for the building of stage of one's positive mental health. Lucia,Danielle (2014) supported the present results yoga participants perceived higher levels of mental wellness, physical wellness and subjective well-being. Auty etal (2015) suggested that yoga and meditation have favorable effects on prisoners Mehta and Taneja (2013) concluded that there is a marked improvement in psychological wellbeing of students after performing short-term yoga practices.Weinber and Thomas et al (2013) suggested that laughter yoga shows premise as an effective intervention to temporary increase wellbeing. Moliver,Mika and Chartand et al(2013) results showed does response effect with yoga experience exercising an incrassating protective effect against low levels of SWB and vitality.

CONCLUSION

The findings revealed that the significant wellbeing difference between the adults with respect to their yoga practice. This study is very fruitful which suggests that more emphasis should be given in yoga therapy to improve the positive approach of thinking .The present study could be more effective with a large sample size covering different physical and mental training programs. This study provided a great insight in the area of concern and the way for future research.

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MENTAL HEALTH OF PATIENTS WITH CHRONIC KIDNEY DISEASE

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ABSTRACT

Loss of kidney function is a serious and potentially fatal condition. Dialysis produces several changes in patient lifestyle such as loss of renal function, well being, place in family and work, time, financial resources, sexual function and so on which if left unattended, can increase mental health problems. In light of the particular life situations experienced by kidney patients, the present study assesses the mental health of patients with chronic kidney disease (CKD). Sixty CKD patients not yet requiring dialysis and sixty CKD patients on maintenance hemodialysis were administered the mental health inventory. On mental health subscales, patients on maintenance hemodialysis had higher anxiety, depression, greater loss of behavioral/emotional control, poorer general positive affect, and inferior emotional ties and life satisfaction. Maintenance hemodialysis patients displayed more psychological distress and less psychological well being and poorer global mental health score. Thus, there is a need to change the illness perception of patients to reduce the stress level and disability. For improving the mental health adequate psycho-education should be provided to CKD patients.

Keywords: Chronic Kidney Disease (CKD), Hemodialysis, Mental Health

Mental health refers to one's cognitive and emotional well being, it is focused on how a person thinks, experiences and behaves. Mental health, if somebody has it, can also mean an absence of a mental disorder (Nordqvist, 2015). But the concept of mental health goes beyond this. A person's mental health can affect his/her everyday life, relationships and also physical health. Mental health also incorporates a person's capacity to enjoy life, to attain a harmony between life

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activities and efforts to accomplish psychological resilience. World Health Organization reported mental health as a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.

Physical and mental health is fundamentally linked with each other. Not only does poor mental health affect the physical conditions of a person but people with serious chronic physical conditions are at high risk of experiencing grave mental health conditions (World Health Organization, 2004). Chronic diseases have been known to share a link with increased stress and consequently, poor mental health.

Chronic diseases are a leading cause of morbidity and mortality in India and other low and middle-income countries. The chronic diseases account for 60% of all deaths worldwide; in which chronic kidney disease (CKD) is one of the worldwide leading public health problem and severely affects a person's mental health. Chronic kidney disease is a grim problem, both in terms of the number of patients affected as well as the prohibitive cost of treatment involved. Globally, CKD is the 12th cause of death and the 17th cause of disability (WHO, 2006).

It is estimated, in a study conducted by Jha (2013), that there are about 55,000 patients on dialysis in India, and the dialysis population is growing at the rate of 10–20% annually. End stage renal disease patients have to face not only clinical problems but they are also burdened with financial and logistic problems. The progression of CKD can be slowed but not reversed and ultimately patients progress to end stage kidney disease where they need some form of renal replacement therapy. As the disease progresses, accumulation of waste products lead to complications like high blood pressure, anemia (low blood count), weak bones, poor nutritional health and nerve damage. Also, kidney disease increases the risk of having heart and blood vessel disease. Patients of CKD, not on dialysis, have to keep their BP under control, need a number of dietary restrictions viz. low salt, low protein diet and avoidances of high potassium containing food items mainly fruit, dry fruit and salads. They have to take a number of other precautions like avoiding pain killers and unnecessary contrast studies like CT scan.

A regular follow up with a nephrologist is mandatory. In such a scenario they are bound to have abundant psychological problems. The limitation of fluid is the most frequently identified stressor, followed by limitation of food, itching, fatigue and financial burden (Mok and Tam, 2001). On the one hand, CKD patients have to follow these restrictions and on the other hand, the fear of reaching the stage of end stage kidney disease where they will need dialysis or transplantation is always there. Additionally, the cost of drugs is quite substantive which adds to existing burden. The life style of dependency affects the nature and quality of marital, family and social relationships. A number of studies have focused upon the effects of hemodialysis (HD) on patients, including feelings of hopelessness, perceptions of loss and lack of control, job loss, and altered family and social relationships (Kimmel, 2001). End stage renal disease (ESRD) is a lifelong disease; feelings of lack of control and perceptions of overwhelming illness might be inevitable. The intrusiveness of these thoughts is related to depression (Christensen and Ehlers, 2002)

People with chronic renal disease, regardless of whether they are pre-dialysis or receiving either HD or peritoneal dialysis (PD), are reported having high levels of fatigue and are often unable to engage in normal daily activities (Bonner, Wellard and Caltabiano, 2010). In addition, fatigue is positively correlated with depression (Chen, Tsai, Hsu, Wu, Sun and Chou 2010; Sklar, Riesenberg, Silber, Ahmed and Ali, 1996), and negatively correlated with quality of life (Lee, Lin, Chaboyer, Chiang and Hung, 2007). These unattended psychological problems lead to poor coping skills which further lead to lower quality of life, well being and poor mental health of a patient.

Therefore, considering the heavy toll which kidney disease causes, the present study was undertaken with the aim to assess and compare the mental health of chronic kidney disease patients not yet requiring dialysis and those on maintenance haemodialysis.

METHOD

Design: A two group design was used for the present study. Group I comprised of 60 chronic kidney disease (CKD) patients not yet requiring dialysis and Group II consisted of 60 chronic kidney disease patients on maintenance hemodialysis (MHD).

Sample: A sample of 120 patients, 60 in each group were taken from Division of Nephrology, Pt. B.D.Sharma Post Graduate Institute of Medical Sciences, Rohtak. In group I the patients of chronic kidney disease not yet requiring dialysis (Stage 3, 4 and 5) and in group II chronic kidney disease patients on maintenance hemodialysis were selected. Only stable patients with no acute illness were recruited for the study as per the advice of treating Nephrologist. The age range of the subjects was 28-63 years with a mean of 46.04 years. The duration of illness was 12 - 90 months with a mean of 35.25 months. Further, the MHD duration subjects of group II ranged from 3-56 months with a mean of 17.08 months. Patients were on MHD on twice weekly basis. Patients of both sexes were included. The patients were being followed up regularly at Post Graduate Institute of Medical Sciences, Rohtak, a tertiary care centre in north India. The subjects of two groups were equated to maximum in terms of socio-demographic variables.

Tool:

i) ***Mental Health Inventory:*** The Mental Health Inventory has been developed by Veit and Ware in 1983. It consists of 38 items which describe different states of mental health. Out of 38 items, two are scored on 5-point scale and rest of items are scored on 6-point scale. It includes six subscales viz anxiety, depression, loss of behavioral/ emotional control, general positive affect, emotional ties and life satisfaction, two global scales i.e. psychological distress and psychological well being and a global mental health index score. Higher scores on anxiety, depression, loss of behavioral/ emotional control and psychological distress indicate negative states of mental health and vice versa whereas higher scores on general positive affect, emotional ties, life satisfaction and psychological well being indicate positive states of mental health and vice versa. The high scores on mental health index indicate greater psychological well being and relatively less psychological distress. The Cronbach's alpha of internal consistency was found to be 0.93. For the MSQLI the MHI showed good convergent and discriminant validity.

Procedure: First of all, the purpose of study was explained which helped to establish a proper rapport with the subject. Only those CKD patients were taken who gave their consent and showed their cooperation and interest in the study. After the sample selection each patient was attended separately. The participants were assured of confidentiality which made them comfortable and they could honestly express their feelings. The inventory was administered individually and it was also ensured that each patient has responded to each of the items of the inventory. The questionnaire was administered on MHD patients on a non-dialysis day. Scoring was done as per manual. The scores were tabulated to compute the mean, standard deviations and t-ratio.

RESULTS AND DISCUSSION

The present investigation was conducted to assess and compare the mental health of CKD patients not yet requiring dialysis and those on maintenance haemodialysis. For this purpose mean scores of both the groups were calculated and t-test was applied for testing the significance of difference. The results are depicted in Table 1 and 2 respectively.

It is observed from table 1 that the CKD patients on maintenance hemodialysis have significantly higher level of level of anxiety than the CKD patients not yet requiring dialysis. The higher mean of CKD patients on MHD indicate extreme anxiety and somatic anxiety symptoms such as breathlessness, palpitations, sweating and fear of dying. A significant lower mean of the chronic kidney disease patients yet not requiring dialysis indicated just opposite positions i.e. less anxiety, independence, stability and less involved in tensions. The subjects of group II are more anxious than the subjects of Group I.

Table 1: Means, SDs and t-values of two groups (Group I - chronic kidney disease patients not yet requiring dialysis and Group II- chronic kidney disease patients on maintenance hemodialysis) on six subscales of Mental Health.

Variables	Group I		Group II		t-value
	Mean	*SD*	*Mean*	*SD*	
Anxiety	22.42	5.23	39.22	6.02	16.31**
Depression	8.50	2.38	16.83	3.27	15.94**
Loss of behavior/ emotional control	18.65	4.83	36.43	6.92	16.30**
General positive affect	42.65	7.31	21.12	6.81	16.68**
Emotional ties	9.22	2.04	5.02	1.56	12.63**
Life satisfaction	4.17	0.78	2.43	0.85	11.59**

** Significant at 0.01 level

It is observed from the above table that the CKD patients on maintenance hemodialysis have significantly higher level of depression than the CKD patients not yet requiring dialysis. The higher mean scores of group II means that chronic kidney disease patients on maintenance hemodialysis have feeling of high lassitude, passivity-dejection, overwhelming indecisiveness and feeling of worthlessness as compared to chronic kidney disease patients not yet requiring dialysis. Depression is an important problem in patients on maintenance hemodialysis. It results from the stressful experience of neither maintenance hemodialysis which an individual can neither control nor escape (Kohli and Aggarwal, 2006).

Taking into account the difference on the loss of behavior/emotional control subscale, it was found to be highly significant which implicates that patients on maintenance hemodialysis feel less in control of their behavior and also their emotions. Regarding the general positive affect, the significantly higher mean score of group I indicates that chronic kidney disease patients not yet requiring dialysis have less anxiety, insomnia and negative attitude towards life as compared to those on maintenance hemodialysis patients. Thus, it is clear that as the disease progresses, the patient's feelings of positive affect gradually worsen.

On the next subscale i.e. emotional ties, mean difference was found to be highly significant. Higher mean score of Group I show their good family relationships, feeling of cooperation with others, interpersonal relationships and feeling of attachment with close ones. On the life satisfaction subscale, score of the subjects of group I was significantly higher. It implicates chronic kidney disease patients not yet requiring dialysis are more relaxed and satisfied in life as compared to maintenance hemodialysis patients.

Table 2: Means, SDs and t-values of two groups (Group I - chronic kidney disease patients not yet requiring dialysis and Group II- chronic kidney disease patients on maintenance hemodialysis) on two global scales i.e. Psychological Distress and Psychological Well Being and Mental Health Index.

Variables	Group I		Group II		t-value
	Mean	*SD*	*Mean*	*SD*	
Psychological distress	53.87	12.09	98.92	19.06	15.45**
Psychological wellbeing	60.45	10.49	30.50	8.72	16.99**
Mental health index	171.73	21.74	95.78	25.15	17.69**

** Significant at 0.01 level.

The findings shown in table 2 indicate that chronic kidney disease patients not yet requiring dialysis have lower level of psychological distress than their counterparts. High mean of Group II shows that chronic kidney disease patients on maintenance hemodialysis have high level of psychological distress, anxiety, fatigue, less personal control, irritability, frustration and aggression. On the other hand, lower mean of chronic kidney disease patients not yet requiring dialysis shows their better social and psychological functioning due to lower levels of stress. Baldree, Murphy and Powers (1986) also revealed that fluid restriction was ranked as the highest psychological stressor and the top physiological stressor were muscle cramps and fatigue in patients of hemodialysis. Auslander and Buchs (2002) confirmed that dialysis patients, in general have relatively high levels of psychological distress; difficulty adhering to the treatment regimen and poor self rated health. Hemodialysis patients were more vulnerable to stress than the early stage renal disease patients (Ersoy-Kart and Guldii, 2005).

Taking in to account the second global scale i.e. psychological well being, the mean differences are highly significant. Higher mean of Group I indicates that chronic kidney disease patients not yet requiring dialysis have the tendencies like self-acceptance, personal growth, purpose in life, environmental mastery, autonomy and positive relations with others as compared with members of the other group.

It has been observed from the above table that findings on mental health index indicate that chronic kidney disease patients not yet requiring dialysis have better mental health than their counterparts. Higher mean score on mental health index indicates that subjects of Group I show better mental health, lower levels of stress, good interpersonal relationships, sense of confidence, better quality of life, less dependency, lower levels of depression and anxiety, good sense of emotional and psychological wellbeing. On the other hand, lower mean of CKD patients on maintenance hemodialysis (Group II) shows their poorer quality of life and mental health, including higher levels of depression and anxiety, higher levels of stress, poorer interpersonal relationships, dependency, poor sense of emotional and psychological wellbeing, discouragement, frustrations and maladjustments towards life.

Chronic kidney disease is a multifaceted problem having both physical and psychological connotations for the patient. The findings of present study are in line with some of the earlier studies. Burns and Davenport (2010) reported that patients on conservative management, which although may not prolong life, can maintain the quality of life and functional ability until the final illness in the majority of patients. Hemodialysis patients reported poor mental health in all the areas measured: General fatigue, reduced motivation, reduced activity and mental fatigue (McCann and Boore, 2000). Dependence proneness may have a direct relationship with duration of illness (Kohli and Aggarwal, 2006). Somatic symptoms are common among patients on chronic hemodialysis and they appear to be associated with emotional distress that influences significantly the perceived mental health status (Alvarez-Ude, Fernandez, Vazquez, Mon, Sanchez and Rebollo, 2001). Weisbord, Fried, Arnold, Fine, Levenson, Peterson and Switzer (2005) reported that depression, physical and other mental health symptoms are prevalent, can be severe, and are correlated directly with impaired quality of life and depression in maintenance hemodialysis patients. Strong correlations have been noted between depression and longitudinal outcome among HD patients, including decreased health related quality of life, poor treatment adherence and higher mortality rates (Chen, Tsai, Hsu, Wu, Sun and Chou, 2010; Drayer, Piraino, Reynolds, Houck, Mazumdar and Bernardini, 2006; Kao, Lai, Tsai, Jan, Chie and Chen, 2009). Chilcot, Wellsted, Da and Farrington (2008) reported that 20–30% of dialysis patients have significant depressive symptoms compared to the prevalence of depression in the non dialysis patients of approximately 16%.

A close look at the results on all the subscales as well as the global scales underlines the marked differences in the mental health levels of both the groups. The patients of the second group i.e. those on maintenance hemodialysis display poorer mental health on all parameters indicating a close link between the progress of disease and mental health. The study points toward the fact that for the patients undergoing hemodialysis, besides the disease itself, accompanying modifications in the occupational, marital, familial, societal, and personal life provide a sufficient base to give rise to stress, anxiety, depression and many more psychological problems. The results of present study implicate that MHD patients need more psychological management along with medical care. For this, it is important that illness perception of patients may be altered in a way to perceive the life changes in a less disturbing way. An extensive strategy for overall management i.e. physical care as well as psychological handling of such patients is required. Not only the physicians have to be sensitized in regard to the psychological aspects of chronic kidney disease, but, in addition, there is requirement of counselor to handle and discover the answer to these psychological issues confronted by such patients. There is a need to design effective psycho-education programs for improving the mental health of CKD patients. Thus, it is recommended that there is a need to design psychological intervention which helps the CKD patients to deal with problem more effectively.

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SUBJECTIVE WELL-BEING, LIFE SATISFACTION AND COPING BEHAVIOR AMONG MALE AND FEMALE BUREAUCRATS

Shivalika Sharma and Gayatri Raina***

ABSTRACT

The main aim of the present research work was to examine the difference between male and female bureaucrats in terms of subjective well-being, life satisfaction and three sub variables of coping behavior (problem focused coping, emotion focused coping and avoidance coping). The sample comprised of 128 male bureaucrats and 47 female bureaucrats from the state of Himachal Pradesh. The data were collected with the help of three scales i.e. Chinese happiness Inventory, Life Satisfaction Scale and Cope Inventory. t- test was carried out to find out the significance of difference between male and female bureaucrats in terms of subjective well-being, life satisfaction and three sub variables of coping behavior. The results revealed that female bureaucrats scored significantly higher on subjective well-being and life satisfaction as compared to their counterparts. Furthermore, male bureaucrats significantly scored higher on avoidance coping as compared to female bureaucrats. Thus, the present results clearly indicate that female bureaucrats in the state of Himachal Pradesh were significantly more happy and satisfied with their lives as compared to male bureaucrats. Moreover, male bureaucrats used significantly more avoidance coping as their coping mechanism as compared to their female counterparts.

Keywords: Subjective well-being, life satisfaction, coping behavior and bureaucrats.

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Subjective well being includes three components: satisfaction, pleasant affect and low levels of unpleasant affect (Diener, 2000). Positive affect denotes pleasant moods and emotions such as joy and affection. Positive or pleasant emotions are part of subjective well being because they reflect a person's reactions to events that signify to the person that life is proceeding in a desirable way. Major categories of positive or pleasant emotions include those of low arousal (e.g., contentment), moderate arousal (e.g., pleasure) and high arousal (e.g., euphoria). They include positive reactions to others (e.g., affection), positive reaction to activities (e.g., interest and engagement) and general positive mood (e.g., joy). Negative affect includes moods and emotions that are unpleasant and represents negative responses people experience in relation to their lives, health, events and circumstances. Major forms of negative or unpleasant reactions include anger, sadness, anxiety and worry, stress, frustration, guilt, shame and envy. Other negative states, such as loneliness or helplessness are important indicators of ill-being. Some negative emotions are part of life and can be necessary for effective functioning, but frequent and prolonged negative emotions indicate that a person's life is not proceeding happily.

Both men and women have faced some challenging societal trends in the past 40 years. Inglehart (2002) found that in almost every society men and women, occupying high profile positions, have higher income, more prestigious jobs and more authorities which all link with relatively high level of subjective well-being. So, in the high profile jobs there is no significant difference between the subjective well-being of male and female employees. Research also supports that men and women have similar level of happiness in such occupations.

Diener (1984) gives similar finding from the study that compared the level of subjective well-being among men and women and the results revealed that there was no difference in the reported mean level of subjective well being of men and women. Joshi (2010) conducted a study to compare the level of subjective well-being among male and female employees. The study showed there was no gender difference in terms of subjective well-being and both males and females perceived and evaluated subjective well-being in their lives in a similar manner.

A number of other studies have also reported that subjective well-being does not very by gender (Andrews and Withey , 1976; Cambell, Converse and Rodgers 1976 ; Diener and Diener, 1996).

Life satisfaction represents how a person evaluates or appraises his or her life taken as a whole. Life satisfaction intends to represent a broad, reflective appraisal the person makes of his or her life. The term life defines all areas of a person's life at a particular point in time or as an integrative judgment about the person's life since birth (Chang and Sanna, 2001; Seligman, 2002).

Number of researchers have focused their research on evaluating gender as a determinant of life satisfaction. However, the results of many of the studies have been contradictory. Some studies have shown women to be more satisfied with their life than men (Wortman,1975; Murray and Atkinson, 1981; Clark, 1996) whereas other studies have shown men to be more satisfied than women (Hulin and Smith, 1964; Weaver, 1974; Snapiro and Stern, 1975; Forgionne and Peeters, 1982; Jagacinski, 1987; Chiu, 1998).

A number of studies have also reported that life satisfaction does not vary by gender (Andrews and Withey, 1976; Campbell et al 1976; Diener and Diener, 1996). On the other hand, some researchers have found that women use more social resources in the prediction of life satisfaction than men (Diener and Fujita, 1995). Plagnol and Easterlin (2008) have found that men are more satisfied with their financial status and family than women. They argued that there were no major differences in the judgments about life satisfaction among males and females, but they seemed to rely on different resources in the evaluation of their life satisfaction.

Dolan and Gosselin (2000) conducted a study to empirically test a reciprocal model of job satisfaction and life satisfaction while controlling for some social demographic variables. 827 employees were surveyed. Results showed that there was no significant gender difference in life satisfaction, but female were more satisfied in their jobs than males. However, Gropel (2001) reported that women scored significantly higher than men in terms of life-satisfaction.

In 2013 Tiefenbach and Kohlbacher conducted a study on happiness and life satisfaction in Japan by gender and age. Results indicated that income or financial stability affects life- satisfaction equally among both men and women.

In a recent study Irpate (2013) examined the impact of gender on some organizational variables like work motivation, job satisfaction, need for achievement and life satisfaction. The sample of 200 employees was selected. There was no significant difference between male and female employees on life satisfaction.

Coping consists of the cognitions and behavior that people use to assess and reduce stress and to moderate the tension that accompanies it (Billings, Cronkites, & Moos, 1983). It follows that the relationship between coping and stressful event represents a dynamic process. Coping is a series of transactions between a person who has a set of resources, and particular environment with its own resources, demands and constraints (Lazarus & Launier, 1987). Thus, according to Taylor (2006), Coping is a dynamic process and not a onetime action that an individual takes. It is a set of responses, occurring over a period of time, by which environment and person influence each other.

Male and female employees usually adopted different coping strategies when they were under stress (Barnett, Biener and Baruch, 1987). It is argued that females are more likely to use "emotion-focused" coping strategies compared to males who are more proficient with 'problem focused' coping strategies (Billings and Moos, 1981; Stone and Neale, 1984). Men and Women are expected to differ in their coping process for several reasons. Socialization hypothesis suggests that men and women are socialized to deal with stressful events in different ways. Gender role expectations and stereotypes force men to deal with stress instrumentally than emotionally, and on the contrary, encourage woman to express their emotions and use emotion focused strategies more frequently and also seek emotional support (Pearling and Schooler, 1978). Lindquist, Beilin and Knuiman (1997) also found that men were more likely to use maladaptive coping strategies or avoidance coping strategies, such as consuming alcohol and following unhealthy eating patterns.

METHOD

Sample

The sample of 128 male bureaucrats and 47 female bureaucrats were selected for the present research work from the state of Himachal Pradesh.

Tools

i) ***Chinese Happiness Inventory (CHI):*** Subjective well-being was measured with the help of Chinese Happiness Inventory (CHI) which was developed by Lu and Shih in 1997. This scale has 48 items measuring subjective experience of happiness. Three basic elements of happiness concept are:- Positive affect, Absence of negative affect and Overall satisfaction towards life. The reliability of the scale has been established through cronback-alpha which is .95, the one month test-retest with the sample of 40 undergraduate students is .66 and the 2.5 year test-retest with community adults is .40. Concurrent validity was evidenced by its correlation of .62 with the life satisfaction scale (Dienee, Emmons, Larson & Griffin, 1985), .67 with composite means of domains satisfaction, 0.4 with a measure of positive affect and .52 with a lack of happiness scale.

ii) ***Life Satisfaction Scale:*** The life satisfaction scale, developed by Alam and Shrivastava (1971) was used to measure life satisfaction among the selected sample of bureaucrats. The scale consists of 60 items related to six areas viz. health, personal, economic, marital, social and job. The responses are to be given in 'yes' or 'no' format, indicating satisfaction or dissatisfaction. There is no time limit yet it takes about 20 minutes to complete the questionnaire. Reliability co-efficient obtained was .84.

iii) ***Cope Inventory:*** Carver, Scheier and Weintraub (1989) developed a multidimensional coping inventory to assess the different ways in which people respond to stress. To measure the dispositional coping style, the 60 items on the scale are framed in terms of what the person usually does. The inventory contains the following 15 sub categories which have been categorized into the following three broad categories namely: Problem focused coping, Emotion focused coping and Avoidant coping. It is a 4 point Likert scale ranging from 1(I haven't been doing this at all) to 4 (I have been doing this a lot). Alfa coefficients ranging from .41 to .85 for the sub scale and .86 for the total instrument have been observed. Estimates for test – retest reliability of the Cope scale ranging from .46 to .86 and .42 to.89 (Carver, Scheier & Weintraub, 1989).

Procedure

Bureaucrats were approached directly in their offices. The set of scales was given to the bureaucrats at their respective places of posting and later collected back. Proper instructions were given beforehand.

RESULTS AND DISCUSSION

The t-test was carried out to find out the significance of difference between the mean scores of male and female bureaucrats on subjective well-being, life satisfaction and three sub variables of coping behavior. The results of t-test are presented in Table 1 and graphically depicted in Figure 1.

Table 1. Mean, SD and t-ratio on subjective well-being, life satisfaction and three sub variables of coping behavior among male and female bureaucrats.

Variables		Male Bureaucrats		Female Bureaucrats		t-ratio
		Mean	*SD*	*Mean*	*SD*	
Subjective Well-being		79.04	18.25	88.88	21.344	2.867**
Life Satisfaction		41.44	4.940	43.70	4.067	3.105**
Coping	Problem Focus	58.45	8.472	58.02	8.570	.305
	Emotion Focused	66.33	12.665	66.32	12.027	.008
	Avoidance	21.05	3.753	16.80	1.616	10.480**

** p< .01 and * p< .05

Table 1 and Figure 1 clearly indicate that female bureaucrats (M = 88.88) have significantly (t = 2.867, p< .01) scored higher on subjective well-being as compared to male bureaucrats (M = 79.04). Likewise, female bureaucrats (M= 43.70) have also significantly (t = 3.105, p< .01) scored higher on life satisfaction as compared to male bureaucrats (M = 41.44).

Furthermore, Table 1 reveals that male bureaucrats (M = 21.05) have significantly (t = 10.480, p< .01) scored higher on avoidance coping as compared to female bureaucrats (M = 16.80).

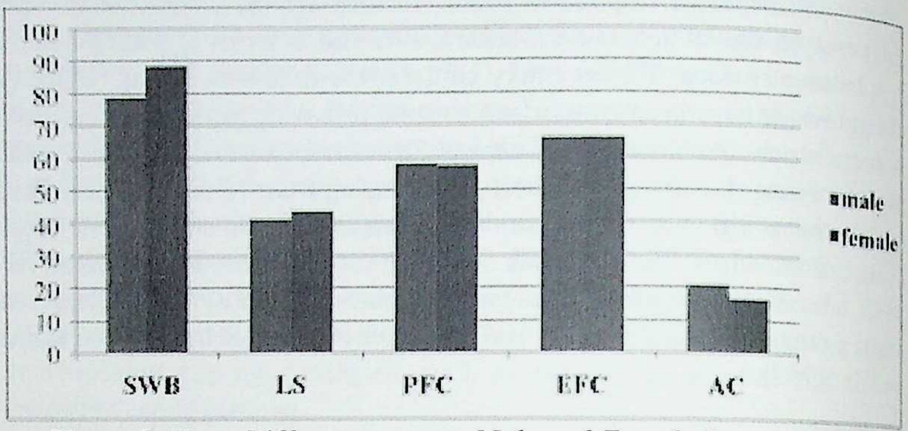

Figure 1. Mean Difference among Male and Female Bureaucrats in terms of subjective well-being, life satisfaction and three sub variables of coping behavior (problem focused coping, emotion focused coping and avoidance coping)

Results of the present investigation reveal that female bureaucrats have significantly higher subjective well-being as compared to male bureaucrats. This finding is in complete contrast to what most of the previous researchers (Andrews and Withey, 1976; Cambell, Converse and Rodgers 1976; Diener and Diener, 1996; Joshi, 2010) have reported that no significant gender differences exist between male and female employees occupying high profile jobs. Social changes that have occurred over the past four decades have increased the opportunities for women and a standard economic frame-work would suggest that these expanded opportunities for women would have increased their subjective well-being (Stevenson and Wolfers, 2009).

Williams (2006) also examined a balanced pattern of daily occupations and life style factors as contributors to working women's subjective well-being. Various reasons for employment whether for monitory gains or personal satisfaction affected the well-being of employed women. Williams (2006) also reported that among African-American professional women, it was found that attainment of multiple degrees, the establishment of professional career, achieving financial independence and the obtainment of coping resources may be a major factor that may increase their subjective well-being.

Another significant finding of the present study was that female bureaucrats were highly satisfied with their lives as compared to male bureaucrats. Schedule flexibility seems to be the factor which might have reduced work-family conflict for women, but not for men. Schedule flexibility provided female bureaucrats with the opportunity to minimize work family conflict as well as their stress level and it also promotes work-family enrichment and improve functioning and performance at work and home. Thus, female bureaucrats were highly satisfied with their lives as compared to male bureaucrats. Diener and Fujita (1995) observed that social resources (i.e. family, friends and social services) are predictive of life satisfaction for women.

Life satisfaction is highly related to income and the social status that one holds in larger social system. Females are more socialized to draw their sense of identity and status from work and income. They tend to look to income as an important factor of their success and satisfaction with their life. Thus, female bureaucrats in the state of Himachal Pradesh are more satisfied with their lives since they have been able to secure themselves financially as well as hold a better status within a large social context. Gropal (2001) also reported that women scored higher than men on the dimension life satisfaction.

The findings of the present research work further reveal that male and female bureaucrats did not differ significantly in terms of problems focused coping and emotion focused coping. However, the results indicate that significant difference between male and female bureaucrats emerged in terms of avoidance coping. Male bureaucrats scored significantly higher on avoidance coping in comparison to female bureaucrats.

Research evidence suggests that different coping strategies have been adopted by different individuals working at different organizational levels. Avoidance coping was predominantly used by males and emotion focused coping has been used significantly more by females (Billings and Moos, 1981). The results of Dhillon (1993) partially support the present findings that male entrepreneurs more often used the avoidance coping with stressful problems. On the other hand, female entrepreneurs preferred the problem focused coping for dealing with stressful situations.

Being able to effectively cope with stress can be the first step to preventing psychological distress. Talking with friends and family, exercising, praying or actively addressing the cause of stress may enhance overall subjective well-being (Tyler and Ellison, 1994; Wang and Patten, 2002; Andre, Petterson, Hedbled, Janzon and Ostergen, 2006). On the other hand, maladaptive and avoidance coping such as drinking or denying the existence of the stressful situation, have been found to be associated with increased level of stress (Gore-Felton, Koopman, Spiegel, Vasvick, Brodino and Winningham, 2006). So, significant gender differences have been reported by researchers for stress coping strategies (Matheny, Ashby and Cupp, 2005).

In a meta-analytic review of gender differences in coping, Tamres, Janicki and Helgeson (2002) found that women tended to use social support and help-seeking behaviors to cope with stress, which may be protective factors against stress (Tolkelson and Muhonen, 2004; Plaisier, Bruijin, Greaf, Cave, Beekman and Penninx, 2007). Lindquist, Beilin and Knuiman (1997) found that men were more likely to use maladaptive coping strategies or avoidance coping strategies, such as consuming alcohol and following unhealthy eating patterns. Furthermore, McDonough and Walters (2001) also found that men were five times more likely to consume more than 14 servings of alcoholic beverages during a week presumably as a mechanism to deal with stress.

CONCLUSION

It can be concluded from the above discussed findings of the present investigation that female bureaucrats in the state of Himachal Pradesh have significantly higher subjective well-being and experience a significantly greater life satisfaction in comparison to their male counterparts. Another noteworthy finding of the study is that regardless of gender the bureaucrats use problem focused and emotion focused coping overwhelmingly more than avoidance coping but gender difference has emerged to be significant only for avoidance coping.

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EMOTIONAL INTELLIGENCE AS A PREDICTOR OF RESILIENCE

Annu Deepti Hooda** and NovRattan Sharma****

ABSTRACT

The present study attempts to examine the relationship between Emotional Intelligence and Resilience among adults. The research sample consisted of 100 respondents (50 males and 50 females) with the age range of 25 to 55 years were selected from Rohtak district in Haryana. Emotional Intelligence and Resilience of all the subjects was assessed using Emotional Intelligence scale and Resilience scale. The data was analyzed by using Correlation and Stepwise Multiple Regression analysis. All the dimensions of Emotional analysis were found to be significantly and positively correlated with Resilience. Stepwise multiple regressions were applied in order to examine the extent to which weighted combination of various dimensions of Emotional Intelligence predicted Resilience. Results of the regression analysis pointed out three dimensions of Emotional Intelligence i.e., Motivation, Self Awareness and Social Skills significantly and positively predict Resilience. The findings of the present study highlights the need for further research in designing and developing intervention programs focusing on improving individual's emotional intelligence in order to enhance resilience.

Keywords: Emotional Intelligence, Resilience.

The term resilience stems from Latin (resiliens) which referred to the pliant or elastic quality of a substance (Joseph, 1994). Resilience is a familiar word in everyday language, the term resilience carries different meanings across different contexts. Norm Garmezy was one of the most important pioneers in the conceptualization and study of resilience from the early 1970s onward (Garmezy, 1974, 1985). Particularly during the last two decades and with the emergence of

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"positive psychology", as a major movement (Seligman & Csikszentmihalyi, 2000), there has been a marked tendency for researchers, clinicians, and policy makers to shift their focus from risk to resilience (e.g., Mohaupt, 2008). Garmezy's (1991) triadic model of resilience provided a widely accepted ecological framework for understanding the resilience process. Multiple scholars use this framework to study resilience (Gordon & Song, 1994; Morales & Trotman, 2004; Werner & Smith, 1982). The triadic model described the dynamic interactions among risk and protective factors on three levels (individual, family, and environmental). The model also emphasized that resilience is a process that empowers individuals to shape their environment and to be shaped by it in turn. Similarly, Cicchetti and Lynch's (1993) interactive ecological-transactional model of development highlighted how certain contexts (e.g. culture, neighborhood, family) interact with each other over time to shape development and adaptation. These ecological models highlight the intersection of varying influences upon one's development and how risk and protective factors can interact to enhance or inhibit a person's resilience.

Resilience is conceptualized as a developmental process or a dynamic capacity rather than as a static outcome or trait. According to Masten (2014), resilience encompasses the capacity of a dynamic system to adapt successfully to disturbances that threaten system function, viability, or development. Baumgardner and Crothers (2009) defined Resilience as "a class of phenomenon characterized by good outcomes in spite of serious threats to adaptation or development". Implicit in the concept of resilience as a dynamic process is the understanding that resilience can grow or decline over time depending on the interactions taking place between an individual and their environment and between risk and protective factors in an individual's life (Borman & Rachuba, 2001; Werner & Smith, 1992). Therefore, an individual may be resilient at certain times and not at others, depending upon the circumstances and relative strength of protective factors compared to risk factors at the given moment (Winfield, 1991).

Resilience is inhibited by risk factors and promoted by protective factors (Alvord & Grados, 2005; Benzies & Mychasiuk, 2009; Fergus & Zimmerman, 2005; Martinez-Torteya, Bogat, von Eye, & Levendosky, 2009; Masten, Best and Garmezy, 1991; Rak & Patterson, 1996; Walsh, 2003). The risk factors are circumstances that increase the probability of poor outcomes. Whereas, Protective factors alter responses to adverse events so that potential negative outcomes can be avoided. Researches have shown that protective factors, both internal and external, may buffer, intercept, or even prevent risk (Werner, 1982). According to Benzies and Mychasiuk (2009), resilience is optimized when protective factors are strengthened at all interactive levels of the socio-ecological model that is at individual level, family level, and community level. Researches have shown that an individual's intelligence, connections and attachments (Alvord & Grados, 2005), coping skills, temperament, health, gender (Benzies & Mychasiuk, 2009), and internal motivation (Masten, 2001) contribute to resilience. One of the personal protective factors that may greatly influence Resilience is emotional intelligence.

Emotional intelligence is a concept that primarily helps individuals understand and manage their own emotions and those of others, empathizing, increasing motivation and improving self-confidence. Since its inception, a variety of models of EI have come to the fore (e.g., Bar-On, 1997; Goleman, 1995; Petrides & Furnham, 2001; Salovey & Mayer, 1990; Schutte et al., 1998) each offering divergent perspectives on the relative components of EI. There are essentially two schools of thought on Emotional -Intelligence and how it is defined. The mental "ability" models focus on emotions themselves and their interactions with thought. This is the model used by Mayer and Salovey. The "mixed" models treat mental abilities and a variety of other characteristics, such as motivation, states of consciousness and social activity, as a single entity as in those used by Bar-On and Goleman in their Emotional Intelligence models. Mixed models of Emotional Intelligence tend to be more broad in their definitions as compared to those mental ability models applied by researchers and theorists. In general, Emotional Intelligence includes two components of Emotional Intelligence, (i) *Personal components*: The foundation of Emotional Intelligence is self knowledge. It includes the ability to understand and manage own emotions. There are three components of personal components: Awareness of our own emotions, Self – motivation and Managing one's our emotions. (ii) *Interpersonal component*: This is the second important component of Emotional Intelligence. It includes the ability to identify, assess, and manage the emotions of others. There are two main component of interpersonal component: Empathy and Handling relationship. Therefore, the main aim of the present investigation was to study the relationship between Resilience and Emotional Intelligence.

METHOD

Design: For the present study a correlation design was used to explore relationship between Resilience and Emotional Intelligence.

Sample: A purposive sample of 100 adults (male=50, female=50) with the age range of 25 to 55 years were selected from Rohtak district in Haryana.

Tools: For assessment following tools were used:

(i) ***Emotional Intelligence Scale:*** Emotional Intelligence Scale developed by Singh (2004), was used to assess the Emotional Intelligence of the respondents. The scale has 5 dimensions of Emotional Intelligence i.e. Self awareness, Self regulation, Self motivation, Social awareness and Social skill. Each dimension has 12 items. In all there are 60 items. Using 5 point rating scale the respondents are required to indicate the extent of their agreement with each item using the following response format: 1. Not at all describe me 2. Describes me little, 3. Describes me moderately well, 4. Describes me well, 5. Describes me very well.

The scale has sound psychometric properties, good reliability and concurrent validity.

(ii) ***Resilience scale:*** Resilience scale (Wagnild & Young, 1993) was used to measure the resilience level of the subjects. The scale consists of 25 items using a 7 point scale; rated from 1(strongly disagree) to 7(strongly agree). The statements are scored in range 1-7 where 1.means strongly disagree, 2. Disagree, 3. Slightly disagree, 4.Neutral, 5. Slightly agree, 6. Agree and 7. Strongly agree. Wagnild and Young (1993) reported reliability co-efficient of .91 for the scale, indicating that the resilience scale is reliable. Cronbach's alpha coefficients ranged from .72 to .94 supporting the internal consistency reliability of the Resilience Scale.

Procedure: The aim of the present study was to examine the relationship between Resilience and Emotional Intelligence. The Scales of Emotional Intelligence and resilience were administered on all 100 subjects. All the subjects of the study were approached personally. The tests were administrated either individually or in a small group of 2-3 individuals. The selected subjects were requested to answer frankly and honestly as the information provided by them would be kept confidential and would only to be used for research purpose. All the tests were paper-pencil tests and instructions for tests were provided separately on the first title page. Data of all the subjects was collected by applying the same procedure. Generally one subject took overall 45-50 minutes to complete the questionnaire. After the data collection was over, both the questionnaires were scored as per the scoring patterns prescribed by their authors in manuals.

RESULT AND DISCUSSION

In the present study a correlation design was applied to test relationship between Emotional Intelligence and Resilience. The data, collected from 100 subjects using appropriate scales and tests for each variable, was analyzed by using Correlation analysis and Stepwise Multiple Regression analysis.

The correlation co-efficient between the five dimensions of Emotional Intelligence and Resilience are presented in table 1.

Table 1: Coefficients of Correlation between Resilience and Emotional Intelligence dimensions.

Emotional Intelligence dimensions	*Resilience*
1. Self awareness	.74**
2. Self regulation	.62**
3. Motivation	.74**
4. Social awareness	.70**
5. Social skills	.59**

*p< 0.05, ** p< 0.01.

The first dimension of Emotional Intelligence is Self awareness. Results in table 1 clearly show that resilience is significantly and positively correlated with Self awareness (r=.74, p>0.01). This means a resilient person is fully aware of self. Similar results were reported by Masten (2001) that emotional intelligence has significant effect on the stress resilience ability of students both in their academic as well as personal life. Self regulation, a dimension of Emotional Intelligence, was found to be significantly and positively correlated with Resilience (r=.62, p> 0.01). This shows that an individual who has the ability to achieve the goals and adjust to new challenges is more resilient. The third dimension of Emotional Intelligence is Motivation which was significantly and positively correlated with Resilience (r=.74, p> 0.01). This implies that an individual who has the ability to motivate himself to work hard for his better future and fully confident find the way is more resilient. Social awareness is the fourth dimension of Emotional Intelligence is positively and significantly correlated with Resilience (r=.70, p> 0.01), which implies that an individual who has the ability to understand and is aware of other's feelings is also more resilient. Social Skills, a dimension of Emotional Intelligence, and Resilience is positively and significantly correlate (r=.59, p> 0.01). Thus, an individual who has good communication skills, leadership qualities, is cooperative and manages conflict well is more resilient.

In order to examine the extent to which weighted combination of various dimensions of Emotional Intelligence included in the study predicted Resilience, stepwise multiple regression was applied to the obtain data. Although correlations are very useful statistical tool to know the associations yet they provide no idea about the predictive power of the variable. Therefore, multiple regressions were worked out using stepwise method. The stepwise multiple regressions have an advantage over standard regression in the sense that it takes only the significant contributor in the equation regression.

Table 2: Predictors of Resilience as shown by step wise multiple regression analysis.

S.No.	*Predictors*	*Multiple R*	*R Square*	*R Square Change*	*B*	*F*	*p<*
1	Motivation	.74	.55	.55	2.90	117.46	0.1
2	Self awareness	.81	.65	.11	1.69	93.40	0.1
3	Social Skills	.82	.67	.02	.85	67.10	0.1

The results of Regression analysis reveal that 3 predictor variable meet the criteria i.e. Motivation, Self awareness, Social skills. Table 2 shows that Motivation, dimension of Emotional Intelligence significantly predict Resilience with Multiple R .74 and R Square is .54 (F=117.4, P<0.1). This means that 55% of variance in Resilience is accounted for by Motivation. The regression coefficient 'B' of Motivation is 2.90. The coefficient correlation matrix (Table-1) also point out that Motivation has positive relation with Resilience. It shows that the predictor has positive direction of influence on Resilience. Thus, high score on Motivation predicts greater Resilience which means individuals who are highly motivated are able to bounce back under stressful situations.

Self awareness entered the next step of regression equation with Multiple R .81 and R Square .65 (F=93.40, P<0.1), indicating 65% of variance in Resilience due to Motivation and Self awareness. Self awareness alone accounted for 11% of variance in criterion variable. The regression coefficients 'B' of Self awareness is 1.69 which points out that the direction of influence is positive. This means people who are more aware about own feelings and emotions are more resilient.

Social skills entered the next step of regression equation with Multiple R .83, R Square .67 and R Square change .02 (F=67.10, P<0.1). This implies that 2% of variance in Resilience is accounted for by Social skills. The regression coefficient 'B' (of Social skills is .85, which point out that direction of influence is positive. Thus, an individual who has good communication skills, leadership qualities, is cooperative and manages conflict well has the capacity to adapt and recover quickly from difficult times i.e. possess high resilience.

Keeping in view the above discussion it can be concluded all the dimension of Emotional Intelligence are significantly and positively correlated. Three dimensions of Emotional Intelligence i.e., Motivation, Self Awareness and Social Skills significantly and positively predict Resilience. Thus, emotional intelligence of an individual significantly predicts his/her ability to successfully adapt to adversity and stress. The results of the present study highlight the importance of Emotional Intelligence in developing resilient individuals. This knowledge can be used in designing intervention programs for improving emotional intelligence and in turn enhancing one's ability to overcome adversity, leading to a healthier and satisfied life.

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DIFFERENT PARENTING STYLES AMIDST THIS ERA OF INTERNET TECHNOLOGY

*Ms Bijoyeta Das**

ABSTRACT

In the present day world, technological improvements and advancements in the process of transfer of information has made a great demand on strategies of various behaviours of individuals.the internet is a new tool that is evolving into an essential part of everyday life all over the world and its use has increased especially among young people.The present study was conducted on a sample of 50,which included 25 parents and 25 college students with a purpose to find out the attitudes and experiences of college students and their parents related to network communication technologies.Here tha sample was collected from a higher educational institute in Guwahati city.The major tools used for gathering related information were Self Devised Questionnaire,Behavioural Problem Checklist and Observation.Here the results revealed that the college students belonging to permissive parenting styles had moderate levels of the use of internet in comparison to the authoritarian parents.Again parents of high class societies were moderately concerned with the change in behaviours of college students on internet use,whereas,parents of middle class societies were more concerned with the use of internet by the students and its adverse effects on their behaviours.The difference in behavioural problems was also due to types of home environment,socialization of children and relation with peers and other family members.

Keywords: Parenting, Era, Internet.

INTRODUCTION

Parenting styles are the global assessment of the overall quality of parenting that an adolescent experiences. Parenting today can be likened to growing plants and the methods for growing plants may advance with the modern era,but the

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basics of planting seeds in the ground getting them watered and weeding around them,then letting the sun work its magic to produce a slow but steady progression of growth will always stay the same.In this relation,socio economic status play a vital role in formation of the overall behaviour of the adolescents.

Good parenting is regarded as a challenge in this era of 21st century.This age of technology has affected the way one raises one's children and offer a morehands off approach to parenting. Adolescence is a time when a person is torn by conflicting feelings. Adolescence is a critical phase of life where an individual undergoes many changes. The word 'adolescence' comes from the Latin verb 'adolescere', which means 'to grow' or 'to grow to maturity'. It is a period of transition when the individual changes physically and psychologically from a child to an adult. Adolescence is much more than one rung up the ladder from childhood. On one hand,he or she is eager to be free and on the other hand,he wants that there is always someone behind him who supports and takes care of him.Parents aim to help the adolescents to leave the childhood and to be ready to take adult responsibilities. Again arguments about major issues v.i.z,sex,drugs, religion and politics are much less frequent during the early years of adolescence (Allison, 1999, Montemayor).

Parenting style provides a robust indicator of parenting functioning that predicts child well being across a wide Spectrum of environment. Parental responsiveness and parental demandingness are important components of good Parenting.

Parenting style usually is conceptualized along two dimensions: parental demandingness (control) and parental responsiveness (warmth), which can be combined to create four categories of parenting: authoritative (high demandingness and] high responsiveness), authoritarian (high demandingness and low responsiveness), indulgent or permissive (low demandingness and low responsiveness), and indifferent or neglecting (low demandingness and low responsiveness) (Baumrind, 1971; Maccoby & Martin,1983). Research has shown that authoritati ve parenting is more related to higher levels of adjustment (Steinberg, Mounts, Lamborn, & Dornbusch,1991), psychosocial maturity (Lamborn,, Elmen, & Mounts,1989), psychosocial competence (Lamborn, Steinberg Mounts & Dornbusch,1991), self-esteem (Bartle, Anderson,& Sabatelli, 1989; Johnson, Shulman, & Cpllins, 1991), and academic success (Dornbusch , Ritter, Leiderman, Roberts, & Fraleig). Earlier the use of internet was like a small dog at the bottom of application pile,fighting for its recognition,but today a large number of people are using web services through internet.The internet is a tool that is evolving into an essential part of everyday life all over the world(Nalwa and Anand,2003) and its use increases especially among youngsters. Use of modern gadgets has made the world smaller in its dimension from the point of view to access to knowledge.

This study explores how parents are incorporating new digital technologies (iPads, smartphones) as well as older media platforms (TV, video games, and computers) into their family lives and parenting practices:

- What does the family media and technology environment look like today?
- How widely have mobile media technologies been adopted? Are they making parents' lives easier?
- How does the role of newer technologies compare to that of "traditional" platforms like television, or to other technologies such as computers and video games?
- How do parents use media and technology as a parenting tool, to help them get things done, or to educate their children?

Few published studies have exploded the use of electronic network resources by college students. It has been found that excessive use of internet, instant messaging-mailing and other such activities are very common in them. Computer and internet use by the college students is a common place in the present day world. It seems that there is no aspect of life that the internet does not touch. Although there is an expectation that electronic networks will strongly impact information, few studies incorporate the use of electronic networks into overall communication pattern and even fewer were found to deal exclusively with the use of internet.

OBJECTIVES

(i) To study the attitudes of the parents towards the use of internet in presence of network communication technologies.
(ii) To find out the various types of parenting styles.
(iii) To study the various behavioural changes in college students.

REVIEW OF LITERATURE

Various studies have been conducted in this field. Erikson relates this stage of life of adolescents as identity formation v/s identity confusion. A study was conducted by Tina L. Norris (2010) on adolescents' academic achievement, bullying behaviour and frequency of internet use. Internet use appeared to influence the relationships between bullying behaviour and achievement scores. Hawkins in the 2004 advocated that moral judgement and behaviour in college students were perceived to be better in comparison to permissive parents. Again Lewis had viewed that Parenting today is to parent in the modern world using timeless parenting skills which are universally effective and which never goes out of style. Young in the year 1999 had reported that excessive use of modern means of communication interferes with one's daily lives. Hence the researcher conducted this study. Results from several studies show that children having a positive relation with parents tend to do better in school (Rollins and Thomas, 1979; Estrada et al. 1987; Kurdek and Sinclair, 1988; Sue and Okazaki, 1990). Dornbusch et al. (1987) examined the relation between parenting style and adolescent school performance using nearly 8,000 adolescents aged 14-18 years) from a variety of backgrounds and indicated that in virtually each ethnic (including Asian), socio-economic and family structure group. Children with authoritative education style have higher social-emotional development and better academic performance. Maddahi, M.E(2010). Lou S-J and others(2010) revealed that most parents would discipline children's online behaviour and communicate with their children to establish norms and rules.

METHODOLOGY

Sample

This sample comprised of 50 college students above 19 years of age, 25 of them belonging to middle class and the rest to high class families. Again parents of these students were included in the study belonging to different kinds of parenting styles. The sample was taken randomly from a higher educational institute in Guwahati city.

TABLE 1: Classification Table of the Sample-

Sample	*Belonging to High Class*	*Belonging to Middle Class*
College Students	25	25
Parents	25	25
Total	50	50

Participants-

There were 100 participants,out of which 50 adolescents were taken from Kamrup districts (25 from Kamrup metro and 25 from Kamrup rural areas). While the rest of 50 were the parents of such adolescents.The participants were taken in an equal number from Kamrup metro and Kamrup rural areas.The schools were selected randomly from different areas of the districts.

Instruments Used

(i) *Behavioural Problem Checklist*: The behavioural problem checklist used in this present study was self devised and it consisted of various items v.i.z, No, Uncertain, Yes.

(ii) *Self Devised Questionnaire*: This was used to find out the attitude and the styles used by the parents amidst this modern era of advanced technology.

(iii) *Observation*: This was done to supplement information provided by Behavioural Checklist for the college students.

Procedure

Before the study, the adolescents,the parents of such adolescents and the school authorities had received written information and if the adolescent wished to participate were required to provide written informed consent. The sample were chosen to fulfil the purpose of the study Researcher then visited the selected schools. Thereafter, the adolescents whoever wished to participate were asked to gather in a classroom and were provided with the questionnaire. They were not forced to give any responses. At the same time, if any individual wanted to discontinue with any of the test or the tasks, they were allowed to leave the classroom. The researcher then, collected the cumulative academic scores of all the adolescents whoever participated in filling up the questionnaire. Thereby the students and the school authorities were thanked for their co-operation throughout the proce

STATISTICAL ANALYSIS

The results indicated that the difference of classes has a great impact on the behavioural changes of the college students. Parenting styles differ on various grounds which are shown below-

Table 2: Table showing the Attitude of the parents towards the adolescents using Chi Square test-

Factors 1.2	*High Class (%)*	*Middle Class (%)*	*Chi Square (Pearson)*
Friendliness	86	93	8.343(N.S)
Surveillance	47	80	
Authoritarian	60	73	
Permissive	40	67	
Concerned with Relation to Peers	47	87	
Concerned with Internet Usage by Adolescents	73	93	

The chi square scores reveal that it was found to be non-significant at 0.05 level . Most of the factors in the score indicates that parents belonging to middle class families were found to be more friendly and concerned with internet usage by adolescents.

Again the parenting styles show the various forms of differences in behaviours of college students

Table 3: Table showing the behavioural changes in college students using Chi Square test-

Factors	*High Class (%)*	*Middle Class (%)*	*Chi Square (Pearson)*
Impatience	47	67	8.633(N.S)
Substance Abuse	87	67	
Distractibility	93	80	
Inattention	80	60	
Extravert	93	73	

The scores of Table 3 reveal that adolescents of high class were found to be more into substance abuse and at the same time, they were found to be highly sociable and open minded.

RESULTS AND DISCUSSION

The overall analysis of the data reveals that the parents either belonged to permissive or authoritarian styles.The home environment of most of the college students was authoritative where the parents lacked in warmth, love and affection to their children to express thoughts, feelings and desires and to make decisions.This has been supported by a study has been supported by D.Gwen(2010) which relates to the fact that authoritarian parents have children withlow self esteem,poor social skills. This also leads to lack of feeling of security and belongingness from their parents. The parents of high class families were less concerned with the changes in them in comparison to the middle class families.

Again the scores of substance abuse was higher in case of students belonging to high class families in comparison to middle class families, which also indicated a major area and an important factor to be focused in. In a study by PatrickE(2012),it was seen that young adults from high class families were prone to marijuana and alcohol abuse. Such factors are often difficult to change and changing such behaviours can lead to substantial improvement in well being and health. Social Activities were found to be very high in case of students belonging to high class families.

The scores of behavioural changes of college students belonging to high class families on the Behavioural Problem Checklist ranges from average to very high, whereas the college students of middle class families ranges from average to moderate. This showed that the former had reported of higher problems in comparison to the latter. Some other factors v.i.z, home environment, relation with peers etc responsible towards the behavioural changes in the adolescents. Some spend time with their family and friends while some others spend time with cell phones, laptops etc.

SUMMARY AND ECOMMENDATION FOR FURTHER RESEARCH

The present study examined the different types of parenting styles and the changes in the behaviours of the college students in this era of modern means of technology. The research study was done on small sample to examine the role of parenting styles of college students. The question under consideration was whether parenting styles should be taken as essential contributors or detractors in formation of behaviours in adolescents. It was seen that permissive parents had a better influence on the behaviour of their students.

Further study could be conducted on a large sample.

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QUALITY OF LIFE, FRUSTRATION TOLERANCE, HEALTH PROBLEMS AND MEMORY AMONG NON-YOGA AND YOGA PRACTICING ADOLESCENTS

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ABSTRACT

Theoretical and philosophical aspects of yoga endow one an impartial and healthy outlook towards life. Studies have shown that yoga practices reduce physical and psychological health problems. Yoga has tremendous positive effect on our mental health and enhances concentration skills. The present study was planned to find out impact of yoga practice on quality of life, frustration tolerance, health related problems, and cognitive functions among normal healthy adolescents. Two hundred sixty adolescents aged range from 14 to 17 years with mean age of 15 years were assigned to130 yoga practicing and 130 non yoga group. Two groups design was adopted. WHO Quality of life –Bref scale and PGI health Questionnaire were administered in group settings and other tests i.e. Frustration Tolerance test and PGI Memory Scale were administered individually. The data was analysed by using SPSS for mean, standard deviation, t-test, and discriminant functional analysis. The results revealed that yoga practicing group is having better quality of life, high frustration tolerance, better memory and low physical and mental health problems as compared to non- yoga group.

Keywords: Quality of life, Frustration Tolerance, Health, Yoga, Adolescents

Patanjali who was considered the "father of yoga," is credited with compiling the Yoga Sutras (the threads of yoga), which date anywhere from 5,000 B.C. to 300 A.D. (Satchidananda, 2005). Yoga is primarily thought of as asanas (postures), breathing (*pranayama*) and meditation (*dhyana*) (Collin, 1998; Hoyez,

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2007). Because many experience relaxation and ease with the practice of yoga, yoga is considered a mind-body exercise. (Hoyez, 2007; Saper et al., 2002) Regular practice of yoga promotes strength, endurance, flexibility and facilitates characteristics of friendliness, compassion, and greater self-control, while cultivating a sense of calmness and well-being. (Collin, 1998; Desikachar, 2005). Sustained practice also leads to important outcomes such as changes in life perspective, self-awareness and an improved sense of energy to live life fully and with genuine enjoyment. Yogic practices enhance muscular strength and body flexibility, promote and improve respiratory and cardiovascular function, promote recovery from and treatment of addiction, reduce stress, anxiety, depression, and chronic pain, improve sleep patterns, and enhance overall well-being and quality of life.(Collin,1998; Deshpande et al., 2008; Iyenger et al., 2005; Kauts & Sharma, 2009; Krishna Rao, 1995; Marlatt, 2002; Nagendra et al. ,1988)

Yoga and Well-being

Improvements in Quality of life has been reported after both yoga and physical exercise (Deshpande et al., 2008). Higher effect sizes have been found, after yoga, in spiritual health (Iyenger et al., 2005)and social relations and in physical health, psychological health, level of Independence, social relations, academic performance, Global health and Environmental domains after physical exercise (Gopal et al., 2011; Gururaja et al., 2011;Kauts & Sharma, 2009; Krishna Rao, 1995; Monk-Turner & Turner, 2010;Nagendra et al. ,1988; Rangan et al.,2009).The concept of "Quality of life" in yoga and spiritual lore takes into consideration the holistic perspective of an individual. Yogic meditation has been found to be effective in reducing tension headache. (Narasimhan et al., 2011, Rani et al., 2011; Telles et al., 2009)

Yoga and Cognition

Yoga also improves brain functions and cognition, easing movement and flexibility, awakening reflexes, and reducing our reaction time . Since (Sridevi et al., 1995; Tells et al., 2004) Yoga is a strong cognition enhancer, it is used as an anti-aging exercise to slow down the effects of aging and maintain efficient cognitive functions and motor skills (Arora & Bhattacharjee, 2008; Chaya & Nagendra; 2008; Raju et al., 1994).Yoga has tremendous positive effect on our mental health. Middle latency auditory evoked potentials have been observed during raja yoga meditation. Researchers have reported the effectiveness of Yoga program in reducing stress significantly at both physiological and psychological levels (Ehud et al., 2010; Gopal et al., 2011; Gururaja et al., 2011; Rangan et al., 2009)

Yoga and Memory

While memory is the latent capacity to retain and recall information, yoga assists in improving memory (Rangan et al., 2009) power through yogic techniques of concentration and meditation. The brain functions of attention (Jensen et al.,

2004) cognition, processing of sensory information (Pictn & Hillyard, 1974) and visual perception are honed with yogic practices. Yogic practices like asanas, pranayama, meditation and Om chanting increase the circulation of blood to the brain. (Pradhan & Nagendra, 2010; Telles et al., 2008). This helps calm the mind and enhances concentration skills. Memory lapses can also be prevented through yogic practices that enhance the power of recall. Many recent research results suggest that yoga practice, including physical postures, yoga breathing (Naveen et al., 1997), meditation and guided relaxation improve memory.

Objectives of the Study

1. To find out the group differences between yoga practicing and non-yoga groups on quality of life, frustration tolerance, health problems and memory.
2. To find out the discriminating variables between yoga practicing and non-yoga groups.

Hypotheses

1. Yoga practicing group would have better quality of life as compared to non-yoga group.
2. Health related problems would be less among yoga practicing group as compared to their non-yoga counterparts.
3. Frustration tolerance would be higher among yoga practicing group participants as compared to non-yoga counterparts.
4. Yoga practicing adolescents would have better memory as compared to their non-yoga counterparts
5. Some of the variables will discriminate between yoga practicing and non-yoga group when all variables are taken together.

METHOD

Sample

The present study was conducted on a sample of 260 adolescents. The sample age range from 14 to 17 years with mean age of 15 years. The sample was divided into two groups, i.e. yoga practicing and non-yoga. The sample was selected from various gurukuls of Haryana using cluster random sampling. The socio-economic status and environmental conditions are similar for both the groups.

Tools

The following tools were used in the present study.

WHO Quality Of Life-Brief: The WHOQOL-BREF quality of life assessment was developed by the WHOQOL Group (1994) with fifteen international field centers, simultaneously, in an attempt to develop a quality of life assessment that would be applicable cross-culturally. The recognition of the multi-dimensional nature of quality of life is reflected in the WHOQOL-100 structure. WHOQOL-BREF four domains: Physical health, Psychological, Social relations and Environment. Multi-trait/multi item analyses were performed to assess internal consistency reliability, and to identify any items that were more highly associated with another domain than its intended domain, or those highly associated with both. The discriminant validity has been determined by using t-tests and the relationship between domains and the two general facet items, using linear regression analysis. All domains were strongly and positively associated with the concept of overall QOL and health.

Frustration Tolerance Scale: Frustration Tolerance scale by Rai (1988) used. This booklet contains four puzzles. The subjects has to solve the puzzles by drawing the figures with the help of a pen or pencil. In these puzzles two are soluble, i.e., II and IV and two are insoluble puzzles, i.e., puzzle number I and III. The experimenter measures the degree of frustration tolerance with the help of this booklet.

PGI Health Questionnaire : PGI Health Questionnaire developed by Wig and Verma, (1979) in has 38 items that measure two areas,where Area A (1-16) is related to Physical Health and Area B (17-38) is related to Mental Health. a score of 1 is given to the items which is responded as "yes" . In this way, higher the score higher will be the problem. Test Retest reliability of the scale is .88 and split half reliability is .86. Inter correlations physical and total .81 psychological and total .86, physical and psychological section .56.

PGI Memory Scale: PGI Memory Scale by Pershad and Wig (1977) provides a measure in10 sub-areas: Remote Memory, Recent Memory, Mental balance, Attention, concentration, Delayed Recall, Immediate Recall (sequential reproduction of sentences), Retention for similar Pairs, Retention for dissimilar pairs, Visual retention and Recognition. PGI – Memory Scale (PGIMS) has a correlation of .71 with Boston memory Scale and .85 with Wechsler memory scale. The test Re-test reliability ranges between .70 and .84 for organic – Psychotic group .48 and .84 for 'neurotic-normal' group.

Procedure

WHOQOL-BREF and PGI health Questionnaires were administered in group settings and other two test i.e. frustration Tolerance (FRTO), and P.G.I. Memory Scale were administered individually. All the tools were scored with the help of standard scoring keys and scoring guides. The score on all the measures were processed statistically by running SPSS for the computation of mean, standard deviation, t-test, inter-correlation and discriminant functional analysis.

RESULTS AND DISCUSSION

In order to meet the objectives of the study, t-test and discriminant functional analysis were performed.

Table 1: Mean, SD and t - value on different variables for Yoga and Non-Yoga

Variable	Yoga Group		Non-Yoga Group		t-value
	Mean	*SD*	*Mean*	*SD*	
Physical QOL	25.98	3.1	24.72	3.02	3.32*
Environmental QOL	32.89	3.11	30.17	4.31	5.84*
Physical Health	1.77	1.77	3.47	2.44	6.43*
Psychological Health	3.65	2.51	6.58	3.84	7.27*
Frusration Tolerance Time	441	148.76	290.3	143.41	8.31*
Frusration Tolerance Attempt	20.47	8.3	12.63	7.59	7.95*
Mental Balance	7.89	1.1	6.91	1.38	6.29*
Attention Concentration	8.2	1.19	7.32	1.17	6.03*
Delayed Recall	9.21	0.92	8.85	1.13	2.77*
Immediate Recall	11.35	0.86	11.01	1.07	2.87*
Verbal Recall(SP)	3.68	0.75	3.42	0.62	3.07*
Verbal Recall (DP)	12.77	0.96	12.22	1.07	4.32*
Visual Retention	8.43	1.46	7.66	1.27	4.45*
Recognition	8.71	1.12	8.07	1.23	4.44*

*p< .01

Table 1 presents t-test of Yoga and non-yoga groups of the observed variables. The mean of yoga group on variable Physical (Quality of life) is 25.98 whereas it is 24.72 for Non-Yoga group. The t-value is 3.32 which are significant at .01 level. It clearly shows that yoga group experienced high Physical QOL as compared to non-yoga group. On Environmental QOL, the yoga group has a mean of 32.89 whereas it is 30.17 for non-yoga group. The SD for variable is 3.11 and 4.30 for yoga and non – yoga group respectively. The t-value is 5.84 which is significant at level .01. It clearly shows that yoga group has higher Environmental QOL as compared to non-yoga group. On Physical health related Problems the mean and SD of yoga group are same i.e. 1.77 whereas non-yoga group has mean and SD of 3.47 and 2.44 on this variable. The t-value for this variable is 6.43. It shows that non yoga group had more Physical health problems as compared to yoga group. On the variable psychological health related problems, the mean and SD of yoga groups are 3.65 and 2.51 respectively as compared to 6.58 and 3.84 of non yoga group. The t-value is 7.27 which is significant at .01 level. It means that psychological health problems are higher in non-yoga group as compared to yoga group among adolescents.

As far as frustration tolerance is concerned, yoga practicing group tolerate the frustration for longer duration and made more attempts as compared to non-yoga group .The mean time of yoga group is 441 seconds as compared to mean time of non-yoga group i.e. 290 seconds. The SD is 148.76 and 143.41 for yoga and non – yoga groups respectively. The t-value is 8.31 which is significant at level .01. The mean and SD of yoga group are 20.47 and 8.3 respectively, whereas non yoga group has a mean of 12.63 and SD 7.59 on this variable. The t-value is 7.95 which is highly significant at .01 level. It clearly shows that yoga group tolerates more frustration and worked longer as compared to non-yoga group.

On variable Mental Balance, yoga practicing group has higher mean (7.89) as compared to non-yoga group (6.91). The t-value is 6.29 which is significant at .01 level. It shows that yoga group had better mental balance as compared to non-yoga group. Another variable Attention and Concentration is also found to have significant difference between the groups. The t-value is 6.09 which is significant at .01 level. It means that attention and concentration of yoga group has higher level as compared to non-yoga group. Both groups significantly differ on Delayed Recall. The yoga group has higher mean (9.21) as compared to non-yoga group (8.85). It means yoga group participants have retained the material for longer time as compared to non-yoga counterparts. The two groups have statistically significant differences on Immediate Recall. The mean and SD of yoga group are 11.35 and .86 respectively whereas non yoga group has a mean of 11.01 and SD 1.07 on this variable. The t-value is 2.87 which is significant at .01 level. Results show that yoga group retains the immediately seen material for longer duration as compared to non-yoga group. Results show that cognitive performance of yoga group on verbal retention is better as compared to non-yoga group. Similarly visual retention of yoga practicing group is far better as compared to non-yoga group.

On variable Recognition, significant differences are found between both groups. Yoga group has a mean of 8.71 whereas it is 8.07 for non-yoga group. The t-value 4.44 is significant at .01 level. The results clearly show that yoga group recognized more items successfully as compared to non-yoga group.

Discriminant Function Analysis

Discriminant analysis indicated that out of 22 variables, four contributed significantly to the prediction of group membership among Yoga and Non-Yoga group.

Table 2: Discriminant Analysis

Step	*df*	*F value*
Frustration Tolerance Time	1/258	69.15**
Psychological Health Problems	2/257	66.82**
Environmental Quality of Life	3/256	50.42**
Physical Health Problems	4/255	39.55**

**p< .001

These results clearly indicate that four variables which are related to quality of life, health problems, and frustration tolerance entered in discriminate equation differentiate between yoga and Non-Yoga groups.

The variable Frustration Tolerance Time being the major contributor to the group discrimination entered the equation at step 1. The F-value of its discriminate function equals to 69.15 (df 1/258) which is significant at .001 probability. It may be interpreted that time taken by these participants in solving unsolvable problems which lead to higher frustration tolerance can be regarded as the most potent discriminate among yoga and Non-Yoga group. The second variable which discriminant between both group is Psychological Health problems. F-value of this contribution is 66.82 (df 2/257), which is significant at .001 probability. Third potent predictor is Environmental Quality of Life, F-value of its contribution is 50.42 (df 3/256) which is significant .001 probability. The fourth and last variable which entered in discriminant function equation in Physical Health problems. F-value of this variable is 39.55 which is significant at .001 probability.

It may be interpreted that four variable i.e. frustration tolerance time, Psychological health problems, Environmental quality of life and Physical health problems differentiate significantly between yoga and Non-Yoga groups when all the variables are taken together.

Table 3: Predicted Classification of Yoga and Non-Yoga Groups

	Yoga	*Non-Yoga*	*Total*
Yoga	99	31	130
%	76	24	100
Non-Yoga	28	102	130
%	22	78	100

It is clear from the predicted frequencies given in Table 4 that out of 130 cases of yoga group 99 were correctly identified and 31 of the cases were not identified correctly whereas out of 130 cases of Non-Yoga group, 102 were correctly identified and 28 were not identified correctly. The percentage of correctly identified cases is 76% among yoga group and 79% among Non-Yoga group. In total 77% classification is correct.

Considered together the findings of the present study indicate significant differences on some of the variables between yoga and non-yoga practicing adolescents. As far as quality of life is concerned, significant difference was found in the sample under study. Yoga practicing group had better quality of life as compared to non-yoga group. Significant differences have also been observed on Physical and Environmental Quality of Life. It shows that those adolescents who practice yoga have better physical as well as environment Quality of Life. Yoga group had higher mean on psychological as well as social quality of life.

Some studies also shows (Kauts & Sharma, 2009; Krishna Rao, 1995; Nagendra et al. ,1988; Monk-Turner & Turner, 2010; Rangan et al.,2009) more or less similar results.

However, as hypothesized, significant group difference is found on the measure of health related problems, where yoga practicing adolescents were found to have less physical health related problems as compared to non-yoga adolescents. Similarly yoga practicing adolescents group has less psychological health related problems as compared to their non-yoga counterparts. It can be discussed that practicing. Yoga can lower down health related problems among adolescents. The finding of present study therefore confirms the hypothesis that there is a significant group difference on physical and psychological health related problems among adolescents.

With regard to frustration tolerance, the yoga practicing adolescents were found to be more frustration tolerant as compared to their non-yoga counterparts. Yoga practicing group involved in solvable and unsolvable task for longer time and make more attempts to solve the tasks as compared to non-yoga participants. On the basis of these results, hypothesis regarding higher frustration tolerance among yoga-practicing adolescents is accepted.

Both the groups were also found to differ on memory. Yoga practicing adolescents have better memory scores as compared to their non-yoga counterparts. On the basis of these results, hypothesis regarding better cognitive performance of yoga group as compared to non yoga group is accepted.

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PARENTING STYLES AND SELF-EFFICACY AMONG ADOLESCENTS

*Mandeep Sharma**

ABSTRACT

Parenting styles and its impact on adolescents' psychosocial development has been an area of interest in the field of psychology. Previous studies have revealed that parenting styles are correlated with adolescents' self-esteem, drug and alcohol use, delinquency and academic performance. This study aimed to investigate the effect of parenting styles namely authoritative, authoritarian and permissive on adolescents' self-efficacy level. The present study was planned to examine the relationship between parental styles and measures of self-efficacy among adolescents. The sample of the study involved 384 adolescents (males=184, females =200) between the age range of 14 and 16 years and one of their parent thus making the total sample of 768. The adolescents were assessed with Self-efficacy Questionnaire whereas parents were administered Parenting Authority Questionnaire-R, to check parental style. The data were analyzed by using Pearson's Product Moment method of correlation and t –test. For mean comparisons, the sample of parents was classified into two extreme groups' i.e High vs. Low (Mean ± 1 S.D.) on the basis of their scores on parenting style and Self-efficacy scores of their wards were compared. The results showed that (i) Authoritarian Parenting Style has negative correlation with self-efficacy measures (ii) Authoritative Parenting style has significant positive correlation with all the measures of self-efficacy whereas permissive parenting style has positive association with social self-efficacy among school children (iii) The two extreme groups (high vs. low) showed significant differences on their self-efficacy score levels.

Keyword: Parenting Styles, Academic Self-efficacy, Social Self-efficacy & Emotional Self-efficacy

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Adolescence has been known to be a rather challenging developmental stage in the human lifespan for adolescents as well as their parents. Adolescents are faced with the pressure of excelling in school and making future career decision. It is also not uncommon for the family, school and society to impose higher expectation on adolescents (Cumsille, Darling, Flatherty, & Martinez). Adolescents' self beliefs in restraining themselves from engaging in misconduct are determined by their level of self-efficacy. The ability to exercise self-efficacy not only affects adolescents' behavior but also has a major influence on their overall well-being. Self-efficacy allows adolescents to engage in tasks that they believe they can succeed and keeps them motivated. Parents consistently play an important role in adolescents' life. Thus, it is important to examine the type of parenting style and its effect on adolescents' self efficacy in order to gain valuable insights that would help to nurture self sufficient future adults.

Parenting Style

Parents play a crucial role in the social and emotional development of children. Indeed, both indirect and direct processes of emotional socialization may shape the child's experience of emotion (Guerrero & Andersen, 1998).Categorizing parents according to parental demandingness and responsiveness creates a typology of four parenting styles i.e. Indulgent (Permissive), Authoritarian, Authoritative and Uninvolved (Maccoby & Martin, 1983). Each of these parenting styles reflect different naturally occurring patterns of parental values, practices and behaviors and a distance balance of responsiveness and demandingness. Parenting style is a pattern of attitudes that parents exhibit toward the upbringing of their children (Darling & Steinberg,1993).

Indulgent Parents are more responsive than they are demanding. They are nontraditional and lenient, do not require mature behavior, allow considerable self regulation and avoid conformation. (Baumrind, 1991). Indulgent parents may be further divided into two types: democratic parents, who thought leniently, are more conscientious, engaged and committed to the child and non-directive parents i.e permissive parents. Permissive parents allow the "child to regulate his own activities as much as possible, avoid the exercise of control" (Baumrind, 1966). Such parents place few, if any demand on their children, allowing children, "complete freedom to make life decisions without referring to parents for advise" (Hickman, Bartholomae & Mckenry 2000).

Authoritarian Parents are highly demanding and directive, but not responsive. Authoritarian parents with clearly defined rules that they expected their children to follow without questioning or even discussion. They are as the really strict parents, authoritarian parents hold high expectations for children and believe that parents are and should be, in complete control. According to Baumrind (1996) these parents "shape, council and evaluate the behavior and attitudes of the child in accordance with a set of standards of conducts, usually an absolute, standard, which values obedience as a virtue and favors punitive, forceful measures to curb the child . Authoritarian parents are obedience and status oriented, and expects their orders to be obeyed without explanation (Baumrind, 1991).

Authoritative Parents are both demanding and responsive. These parents are an integration of the other two parenting styles, setting clear rules and expectations but also encouraging discussion and give and take, especially as their children get older and are able to take more responsibility for them. Such parents "remain receptive to the child's view but take responsibility for firmly guiding the child's actions, emphasizing reasoning, communication and rational discussion in interactions that are friendly as well as tutorial and disciplinary" (Baumrind, 1996).Authoritative parents "monitor and impart clear standards for their children's conduct. They are assertive, but not intrusive and restrictive. Their disciplinary methods are supportive, rather than punitive. They want their children to be assertive as well as socially responsible, and self regulated as well as cooperative."

Self-efficacy

Self-efficacy is defined as a person's confidence and belief that he or she is able to achieve something that has significant effect over their lives. It also has major effect over a person's self esteem and ability to compete with other individuals. Self-efficacy beliefs determine how people feel, think, motivate themselves and behave. Such beliefs produce these diverse effects through four major processes which includes cognitive, motivational, affective and selection processes (Bandura, 1994). Bradley and Corwyn (2001) proposed that environment stimulates or encourages one's behavior such as self-efficacy. Bandura (1995) explains that self-efficacy plays an important role in determining one's capacities to organize and execute courses of action required to produce given attainments. It influences the choices people make, courses of action they pursue, amount of stress and anxiety that one experiences as he or she is involved in the activity. A strong sense of efficacy encourages people to do well in many ways.

Parenting Style and Self-efficacy

Baumrind (1971, 1989) identified two broad dimensions of parenting styles: demandingness which relates to the amount of parental control exerted over children's activities and behavior, and responsiveness that is determined by the amount of warmth and nurturance displayed by parents towards their children. Baumrind then used these dimensions to identify three parenting styles: authoritarian, authoritative and permissive.

Research indicates that Permissive Parenting Style has an impact on Self-efficacy of the child. Adalbjarnardottir and Hafsteinsson (2001) found that adolescents who perceived their parents as neglectful used more licit and illicit drugs compared to adolescents who perceived their parents as authoritative. Children raised by permissive parents have been found to be more prone to delinquent behaviour, display poorer academic competence and achievement, and overall lower levels of psychological functioning (Lamborn, Mounts, Steinberg & Dornbusch, 1991). Permissive parenting has also been found to be related to low self-esteem, less persistence on learning tasks, low patience for frustration, and intrinsic/extrinsic motivational orientation (Ginsberg & Bronstein, 1993). According to Boon (2007), permissive parenting, high self-handicapping, low mastery goals and self-efficacy are notably associated to low achievement whereas higher achievement is linked to authoritative parenting style. Buri, Louiselle, Misukanis, and Mueller (1988) investigated the relationship between parenting styles and self-esteem. Their findings showed that most of the participants who judged both of their parents as authoritarian scored low in self-esteem level. On the contrary, participants who perceived both of their parents as authoritative have high self-esteem. In a study by Qazi (2009) examined the correlation between parenting styles, locus of control and generalized self-efficacy, it was found that authoritative parenting style had a positive correlation with generalized self-efficacy whereas authoritarian and permissive parenting styles showed no association with self-efficacy.Turner, Chandler and Heffer (2009) conducted a research to explore the relation between parenting styles, self-efficacy, achievement motivation and academic performance in undergraduate students. The findings suggested that perceived authoritative parenting styles significantly related to college students' academic performance. Moreover, the results showed that authoritative parenting styles and academic self-efficacy were significant predictors of academic performance. In other words, authoritative parenting styles and academic self-efficacy are two of the contributing factors for academic performance. Furthermore, adolescents who viewed their parents as authoritative were reported less likely to have tried alcohol compared to adolescents who viewed their parents as authoritarian and neglectful (Adalbjarnardottir & Hafsteinsson, 2001).

The present study aimed at understanding about adolescent's self-efficacy is related with different parenting styles as well as impact of parenting style in children self-efficacy level. The review of literature reveled that there is significant relationship exist between parenting style and self-efficacy among adolescents. Researchers showed that authoritarian parenting style has negative relationship with self-efficacy among adolescents (Tam, Chong, Kadirvelu and Khoo, 2012; Shaw, 2008; & while self-efficacy has significant positive relation with authoritative parenting style (Tsemrekal, 2013) and permissive parenting style has significant positive relation with self-efficacy (Lopez, 2002; & Anjum and Kausar, 2009).The major objectives of the study were to study the relationship between measures of self-efficacy with parenting style among adolescents and to analyze the mean differences on measures of self-efficacy between adolescents categorized according to high and low parenting styles (authoritarian, authoritative and permissive.In the present research the following hypotheses were proposed:

1. Permissive and Authoritative parenting style would have positive association with self-efficacy whereas Authoritarian parenting style will show negative correlated with self-efficacy among adolescents.
2. Adolescents with High and low parenting styles would be differing significantly on scores of self-efficacy measures.

METHOD

Sample

The present study was conducted on a total sample of 768 respondents including 384 parents and 384 adolescents (184 males and 200 females) who were studying in IX and X standard. The age range of the adolescent's sample was from 14 to 16 years. The sample was selected by using stratified random sampling procedure from various schools of four districts of Haryana. All the schools were having same educational affiliation and catered to the needs of low to middle socio economic status students. Students were contacted in their respective classes through their class teachers while data of parents was obtained through their wards.

Tools

Following standardized tools were used for the collection for the relevant data to meet the objectives of the study:-

> *Parenting Authority Questionnaire-(PAQ-R), (Rittman et al., 2002)*- PAQ-R is a parental self report version of the original PAQ, intended to use with parents of children. The PAQ-R consists of 30 items, 10 items each for three scales representing Authoritarian, Authoritative and Permissive parenting styles. Items are rated on a 5 point Likert type scale ranging from I "strongly disagree" to 5 "strongly agree". One month test-retest reliability for 22 mothers was .61 for Authoritative, .87 for Authoritarian and .67 for permissive subscales. Data were also gathered from another sample and One month test retest reliability were found to be .54, .88, .74 for Authoritative, Authoritarian and permissive subscale, respectively.
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> *Self-Efficacy Questionnaire (Muris, 2002)*-The Self Efficacy Questionnaire contains 24 items that represent three domains of self efficacy - social self efficacy that deals with the perceived capability for peer relationship and assertiveness, Academic Self efficacy that is concerned with the perceived capability to manage one's own learning behavior, to master academic subjects and to fulfill to the academic expectations and in Emotional Self Efficacy that pertains to perceived capability of coping with negative emotions. Each item has to be

scored on a 5-point scale, which represent 1 "not at all" and 5 "very well". The internal consistency reliability of the SEQ-C appeared to be satisfactory. Cronbach alpha was .88 for the total self-efficacy scores and between .85 and .88 for subscale scores. The internal consistency of SEQ was also sufficient (r = .79).

Procedure

In the initial stage, the participants were contacted in their respective classes and their willingness to participate in the study was obtained. The subjects were administered Self-efficacy Questionnaire. Parenting Authority Questionnaire (PAQ) was administered on one parent of the adolescents through them only. All the subjects were assured that their responses would be kept confidential and would not affect their overall performances in the school.

RESULTS AND DISCUSSION

The first objective of the study was to see the associations between self-efficacy of the adolescents and parenting style of the parents. For this purpose Pearson r was worked out.

Table 1: Relationship between Parenting styles and Self-efficacy

Variable	*Academic Self Efficacy*	*Social Self Efficacy*	*Emotional Self Efficacy*
Authoritarian	-.04	-.08	-.04
Authoritative	.24**	.17*	.23*
Permissive	.12	.19**	.14

**p< .01 level , *p< .05 level

Authoritarian parenting style has non significant negative association with all three measures of self efficacy. This study revealed that in order to maximize children's self-efficacy, parents should practice authoritative parenting style by setting ground rules as well as allowing the children to have their own autonomy and freedom to voice out opinions instead of the old-fashioned authoritarian parenting style (Qazi, 2009). The present study indicate that authoritarian parenting style has negative relationship with self-efficacy among adolescents and received the support from some recent studies (Tam, Chong, Kadirvelu and Khoo, 2012 & Dehyadegary, Nejad, Nasehzadeh and Divsalar, 2014).

Authoritative parenting is found to be significantly positive association with academic self efficacy (r=.24) , social self-efficacy (r=.17) and emotional self-efficacy (r=.23). These results imply that permissive parenting style is not favorable to foster self-efficacy among adolescents. These results support the views by Hetherington and Stanley-Hagan, (2002) where authoritative parenting is related to positive perceptions, academic and socio-emotional child outcomes. In addition, results of this study also indicate that authoritative parenting style is the most effective style that results in children scoring high on measures of competence and self-perception (Baumrind, 1989; Lamborn, Mounts, Steinberg, & Dornbusch, 1991). Authoritative style has constantly been found to be correlated with positive self-perceptions while authoritarian style has repeatedly been found to be correlated with negative self-perceptions (Klein, O'Bryant, & Hopkins, 1996). Result of the present research showed significant relationship between authoritative parenting style and self-efficacy, supporting the first hypothesis.

Another type of parenting, permissive parenting style is significantly and positively correlated with Social self-efficacy and has correlation coefficients of .19. Concerning parenting style and academic self-efficacy, findings revealed that permissive parenting had weak not significant relationship with academic self-efficacy. This is equally expected since academic self-efficacy of the child may be reinforced through social persuasion and the fact that permissiveness does not give room for proper guidance, the child may not be self-efficacious in academic pursuit. This reinforces Bandura, (2000) theoretical proposition that social persuasion and similar social influences that one possesses certain capabilities strengthens students' beliefs that they have what it takes to succeed in academic task. However, only one significant relationship was noted between permissive parenting style and social self-efficacy. This finding is consistent with a previous study by Qazi (2009) found that reported permissive parenting style is not correlated with adolescents' self-efficacy level. Baumrind, (1991) suggested that permissive parents' exhibit low level of demandingness and tend to provide limited supervision. The results of this part have support from the earlier research (Tsemrekal, 2013; Anjum and Kausar, 2009).

Authoritarian parenting had negative non-significant relationship with academic, social and emotional self-efficacy. This result though not significant is an indication of the fact that in authoritarian parenting little or no attention is given to the child's feelings (Preethi & Rosa, 2012). Even though that in social and academic self-efficacy there were negative relationships (considering the authoritarian parenting style), the arid atmosphere for feelings could not be compromised as it gets to do with emotional management and sustainability. Ignoring the feelings of children by their parents is likely to lead to lower emotional self-efficacy. Furthermore, findings revealed that permissive parenting had weak positive-relationship with self-efficacy. Finally, authoritative parenting had positive significant relationship with academic and emotional self-efficacy. This is in line with other studies that have linked emotional self-efficacy to authoritative parenting given the fact that it democratic scenario offering the child the opportunity to make choices under a caring guidance of the parents in India.

Parenting Style is considered as an important variable among adolescents in relation to depression. To see the impacts of parenting style on depression, two groups (Low and High on particular parenting style) were formed and compared with each other to see the self-efficacy level among adolescents. The sample was classified into two extreme groups (Mean ± 1 S.D.) on the basis of their scores on parenting style. Means of the two groups (high vs. low) were compared by using t-test.

Table 2: Mean Difference between Parenting based High and Low Groups on Self-efficacy

Parenting Styles	Low Group		High Group		t-value
	Mean	*SD*	*Mean*	*SD*	
Authoritarian	36.21	4.80	35.95	4.03	NS
Authoritative	35.51	5.41	39.46	3.23	3.95*
Permissive	31.54	4.38	34.87	5.39	2.97*

**p< .01 level *p<.05 level

Table 2 presents the mean, SD of both low and high groups and t-values of the observed variables. A careful inspection of the table shows non significant differences on authoritarian, a variable of Parenting Authority questionnaire. A perusal of the table shows that the mean of low and high on variable authoritative, is 35.51 and 39.46 respectively. The SD for this variable is 5.41 and 3.23 for low and high group of self-efficacy respectively. The t-value is 3.95 which is significant at 0.05 level. According to the results, significant differences exists on authoritative parenting styles, as high vs low group consider self efficacy which is consistent with the previous work done by Glasgow, Dornbusch, Troyer, Steinberg and Ritter (1997), which states that children who perceived their parents as authoritative have high self-efficacy and vice-versa. The results clearly indicate that students who characterized their parents as authoritative were found to have significantly higher academic, social and emotional self-efficacy when compared to their counterparts who described their parents as non-authoritative (i.e., authoritarian, indulgent, or neglectful).On permissive variable, results show marked differences between the groups. The obtained t value is 2.97 on this variable which is significant at 0.05 levels. Turner , Chandler and Heffer, (2009) explain that students who perceived their parents as authoritative and such parents encouraged their autonomy of their children and developed their communication skills effectively, had better academic performance as compared to authoritarian and permissive parents. Also, such students had high academic self-efficacy beliefs, which resulted in higher academic performance as compared to other students who reported their parents as authoritarian. The results indicate that high authoritative and high permissive parenting style is having higher degree of self-efficacy in adolescents as compared to low on these two parenting patterns. Thus, the second hypothesis is verified.

Research has documented that children and adolescents from the families of authoritative parents are more competent and efficient socially and academically compared to those whose parents are non-authoritative (Baumrind, 1991; Maccoby & Martin, 1983). Several researchers note that self-efficacy beliefs play a crucial role in affecting task choice, effort, persistence, resilience, and achievement of individuals (Bandura, 1994; Schunk, 1995). The present results are consistent with the findings of the previous international studies conducted in colleges/ universities which demonstrated that students from authoritative families had the highest academic self-efficacy, whereas those from authoritarian families were found to have the lowest self-efficacy. There are a number of researches which showed the same results (Tam, Chong, Kadirvelu and Khoo, 2012 & Dehyadegary, Nejad, Nasehzadeh and Divsalar, 2014).

A number of studies in Indian settings Joshi, Sharma and Mehra (2009); Sharma and Joshi, (2010); Sharma, Sharma and Yadava (2010), Sharma, Sharma and Yadava (2011), also found similar results in the research related to parenting styles and mental health problems (adjustment problems, depression, self-efficacy) among adolescents. Sharma and Joshi (2010) adjustment was found to be significant positive relationship with Authoritative Parenting Style and Permissive Parenting. It shows that adolescents who have authoritative parents their adjustment (family, health and emotional) is better than others. Positive relation between authoritative parenting and adolescent's adjustment is mediated by adolescent's level of dispositional optimism. Singh and Sharma (2009) conduct a study on perceived parenting behavior in relation to aggression among adolescents. In this study parenting is found significantly correlated with aggression among adolescents. As a parental carelessness / protection, neglect/indulgence has significant negative correlation with aggression. More studies are needed with these variables to have a better understanding of the relationship between self-efficacy and parenting style especially in India.

Considered together the results indicated that parenting practices have a significant impact in self-efficacy among the students. Hence, it may explained that authoritative parenting style in contrast to the authoritarian style of parenting landscape and has a greater impact on students' self-efficacy. In explaining the results, it gives way to two authoritative parenting style landscape and arbitrary to say that the parents have a high level of control and response requirements. They viewed their children as individuals competent and successful and in accordance with their ability to expect. In explaining these findings can be said that parents rarely tolerant to their children the correct information or provide a detailed description. In addition, results of this study also indicate that authoritative parenting style is the most effective style that results in children scoring high on self-efficacy. The present research suggests that those adolescents who have authoritative type of parenting as result, these children better in academic, social and emotional aspect of self-efficacy. In a positive effect on self-efficacy (Bandura, 1997) the main source of influence in the family is focused on self-efficacy, but this influence is reciprocal. If parents create an environment that stimulates the curiosity of children surrounded experiences find their children have helped to build self-efficacy.

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TRAUMATIC STRESS AMONG KASHMIRI PEOPLE

Touseef Rizvi and S. Reshma Jamal***

ABSTRACT

There are certain traumatic stresses, which are experienced by individuals in various conditions or situations. An individual experiences traumatic stress as a reaction to certain life conditions. Some of the traumatic stress like violent crimes, death of a close one and atrocities are not flexible in nature, for once they have become part of an individual's behavior, they do not easily disappear or change into some other forms. Generally speaking, traumatic stresses are unfavorable to the growth and development.

Significant differences were found between the percentages of Kashmiri people living in high and low risk conditions on certain traumatic stressors such as threat of firing *(CR = 5.85, p < .01),* fear of crackdown and searching operations *(CR = 4.71, p < .01),* anger, hostility and aggressive behavior of administration *(CR = 2.76, p < .01),* threat to life *(CR = 2.45, p < .05),* unexpected death of close family member during encounter *(CR = 2.44, p < .05),* disintegration / breaking of the family *(CR = 3.14, p < .01), and* sexual assault and rape *(CR = 27.46, p < .01). Significant difference existed between the comparison group only on* disintegration / breaking of the family *(CR = 4.06, p < .01).*

Keywords: Traumatic Stress, Psychological wellness

Although traumatic stress is not a clearly defined area, it has tended to include stressful events and circumstances that are both extreme and outside the realm of everyday experiences. Stressors are best seen as a line on a continuum ranging from minor or everyday stressors to major stressors. Extreme stressors are those events and circumstances that because of their objective nature place massive demands on individual's abilities to maintain psychological wellness, behavioral and cognitive functioning and physical integrity (American Psychiatric Association,

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1987, 1994). Norris (1990) referred to traumatic stress as the population of events involving "violent encounters with nature, technology or human kind".

Trauma is an inexorable part of human existence, especially in a conflict situation (Sedlock & Hustod, 1996). This fact assumes even greater importance in the light of the fact that trauma could play a key role in the genesis of various psychiatric problems (Margoob et al., 2006). Traumatic stress encompasses exposure to events or the witnessing of events that are extreme and life threatening (Kolk & Weisaeth, 1996). The total lifetime prevalence for any traumatic experience in the community in Kashmir is 58.69% as reported (Margoob et al., 2004).

Individuals are unlikely to be confronted with traumatic stress on any given day. However, traumatic stressors occur more than one might think of violent crime (sexual assault and physical assault), being held captive (arrest), killing of civilians are the frequent source of traumatic stress in Jammu and Kashmir. In addition to the direct victims of these events, emergency service workers such as people, fire fighters, and emergency medical teams are repeatedly exposed to accidents, killings, bomb blasts, grenade attacks, mine blasts, suicide squads. Individuals who are exposed to such type of traumatic events witness the horrible realities and live with the memories that accompany and follow these events.

In the last two decades, Kashmir has witnessed multiple conflicts leading to increase in various psychiatric disorders (Margoob, 1995). During this period there has been persistent violence and trauma situation, resulting in deaths of thousands of people and its aftermath effects like family instability, relocation of people and property damage (De Jong et al., 2008). The wrath that occurred due to natural disasters (snowstorm and earthquakes) during the same time cannot be underestimated (Margoob et al., 2006). The various co morbid psychiatric disorders associated with PTSD include major depressive disorders, anxiety disorders and somatization (Kessler et al., 1995)

Victims of traumatic stress live in specific surroundings or situations in specifying societies, the characteristics of specific circumstances in Kashmir determine the intensity and severity of the consequences of extreme life events such as terrorism and violence. The occurrence of the traumatic events occurs due to diverse situations such as political repression and military atrocities which create intense feelings of alienation, hopelessness and despair among people of Kashmir.

In Kashmir, victimization leads to traumatic events and ruptures in the lives of people of Kashmir. Society has changed with the time, duration, extent, and meaning of trauma for its victims and survivors, and the coping strategies they have used to adapt to it all depends upon the degree of victimization and rupture, the disorganization and severity of the choice of interventions. Tracing the history of multiple traumas along the time direction at different stages of development reveals that in the case of traumatized people of Kashmir, time does not heal but rather magnifies the response to further trauma. Thus, the present investigators feel that there is a need to examine the traumatic experiences in the people of Kashmir exposed to high and low risk conditions.

The main research objectives of the present study are:

1. To develop traumatic stress inventory.
2. To determine differences between the percentages of Kashmiri individuals living in high and low risk conditions on the traumatic stressors.
3. To determine differences between the percentages of Kashmiri males and females living in high risk conditions on traumatic stressors.
4. To determine differences between the percentages of Kashmiri males and females living in low risk conditions on traumatic stressors.

METHOD

Subjects: The sample for the present study consisted of 240 Kashmiri individuals. Of these, 100 individuals belonging to the high- risk conditions were drawn from Kupwara and Budgam and the remaining 140 individuals were hailing from the low- risk condition or place i.e. Srinagar. The relevance of taking sub- samples from the different areas is that high and low risk conditions will differently influence the perception of traumatic stress and coping styles. The sample was further split in terms of the variable of gender (i.e. males = 125; and females = 115).

Tool

The **Traumatic Stress Inventory** (TSI) was developed by the authors by applying item analysis. Quantitative analysis was used to develop Traumatic Stress Inventory, which includes the measurement of item difficulty and item discrimination.

Item Difficulty: For most testing purposes, the difficulty of an item is defined in terms of the proportion (or percentage) of individuals who answer it correctly. The easier the item, the larger this percentage or proportion will be. Here the items are arranged in order of difficulty, so that test takers begin with relatively easy items to proceed to items of increasing difficulty. This arrangement gives the test takers confidence in approaching the test and also reduces the likelihood of their wasting much time on items beyond their ability to the neglect of easier items they can correctly complete.

Item Discrimination: It refers to the degree to which an item differentiates correctly among the test takers in the behavior that the test is designed to measure. For the Traumatic Stress Inventory (TSI), response was recorded as 'Yes' or 'No'. The measurement of item discrimination usually involves a dichotomous variable (the item) and a continuous variable (the criterion).

A common practice in item analysis is to compare the promotion of cases that pass an item in contrasting criterion groups. The two extreme groups such as lower 27 % and upper 73% were identified. The numbers of subjects endorsing each item in U and L criterion groups are expressed in proportions; the differences between these two proportions provide an index of discrimination. Any item whose reached or exceeded 17 were selected. The criterion set for the item selection was at the 0.5 and 0.01 levels of significance. Thus, all the 30 items were retained. The split- half reliability for the TSI was found to be 0.92.

Procedure: The data were collected individually from the subjects through face- to- face interview method. Prior to data collection, the investigator established rapport with the subjects. Each subject was assured that his/her responses will be kept strictly confidential and will be used for research purpose only.

Data Analysis: The data analyzed by means of certain appropriate statistical tests such as item analysis and critical ratio of percentages. Item analysis method was used to develop the tool, namely, Traumatic Stress Inventory (TSI). Data were converted into percentage to analyze. It helped in understanding what percent of the sample face a particular category of traumatic stress. Critical Ratio was used to examine the differences between percentages in comparison groups on traumatic stress.

RESULTS AND DISCUSSION

Table 1: Indicating differences between the percentages of Kashmiri individuals living in High Risk Conditions (HRC, N = 100) and Low Risk Conditions (LRC, N = 140) on the following traumatic stressors.

Sl.No.	*Items*	*Subjects*	
		HRC (%)	*LRC (%)*
01.	Threat of firing	29.00	67.14
02.	Fear of crackdown or searching operations	30.00	60.71
03.	Panic	60.00	50.71
04.	Threat of war / violence	54.00	67.14
05.	Anger, hostility and aggressive behavior of Administration	63.00	45.00
06.	Bomb blast near my house	42.00	52.14
07.	Death of a close family member	39.00	42.85
08.	Threat of life	50.00	34.28
09.	Survived by chance	40.00	40.71
10.	Survived by freak circumstances	41.00	38.57
11.	Financial losses	37.00	40.00
12.	Tension caused by resistance and ignoring The warning to cooperate / to obey	33.00	38.57

13.	Migration to safer places and displacement	28.00	28.57
14.	Troublesome neighbors	23.00	29.28
15.	Major personal illness or injury	27.00	25.00
16.	Self or family members become unemployed	28.00	22.85
17.	Enforced change of residence	23.00	21.40
18.	Robbery or theft in the house	18.00	23.57
19.	Torture of a family member in the prison	20.00	21.42
20.	Seeing death of military *Jawans*	19.00	21.40
21.	Separation reactions of young children	23.00	17.14
22.	Detention in jail of a close family member	16.00	19.20
23.	Unexpected death of a close family member during encounter	26.00	13.57
24.	Disintegration / breaking of the family	32.00	15.00
25.	Dissociation from the family member	17.00	15.71
26.	Robbery of expensive valuables during Search operations	16.00	17.14
27.	Demands after abduction of a family member	18.00	12.85
28.	Abduction	12.00	10.70
29.	Detention in jail of oneself	6.00	2.14
30.	Sexual assault and rape	0.00	3.57

Table 2: Indicating differences between the percentages of Males Living in High Risk conditions (MLHRC, N = 68) and Females Living in High Risk Conditions (FLHRC, N = 32) on the following traumatic stressors.

Sl.No.	***Items***	***Subjects***	
		HRC (%)	*LRC (%)*
01.	Threat of firing	73.52	75.00
02.	Fear of crackdown or searching operations	73.52	78.12
03.	Panic	60.29	59.37
04.	Threat of war / violence	51.47	59.37
05.	Anger, hostility and aggressive behavior of Administration	58.82	71.87
06.	Bomb blast near my house	39.70	46.87
07.	Death of a close family member	38.23	40.62
08.	Threat of life	47.05	56.25
09.	Survived by chance	45.58	28.12
10.	Survived by freak circumstances	42.64	37.50
11.	Financial losses	41.17	28.12
12.	Tension caused by resistance and ignoring the warning to cooperate / to obey	38.23	21.87
13.	Migration to safer places and displacement	23.52	37.50

14.	Troublesome neighbors	20.58	28.12
15.	Major personal illness or injury	23.52	34.37
16.	Self or family members become unemployed	27.94	28.12
17.	Enforced change of residence	22.05	25.00
18.	Robbery or theft in the house	19.11	15.62
19.	Torture of a family member in the prison	23.52	12.50
20.	Seeing death of military *Jawans*	16.17	25.00
21.	Separation reactions of young children	23.52	21.87
22.	Detention in jail of a close family member	14.70	18.75
23.	Unexpected death of a close family member during encounter	23.52	31.25
24.	Disintegration / breaking of the family	19.11	59.35
25.	Dissociation from the family member	16.17	18.75
26.	Robbery of expensive valuables during Search operations	19.11	6.25
27.	Demands after abduction of a family member	17.64	18.75
28.	Abduction	10.29	15.62
29.	Detention in jail of oneself	7.35	3.12
30.	Sexual assault and rape	0.00	0.00

Table 3: Indicating differences between the percentages of Males Living in Low Risk conditions (MLLRC, N = 57) and Females Living in Low Risk Conditions (FLLRC, N = 83) on the following traumatic stressors.

Sl.No.	***Items***	***Subjects***	
		HRC (%)	*LRC (%)*
01.	Threat of firing	71.92	63.85
02.	Fear of crackdown or searching operations	59.64	61.44
03.	Panic	57.89	45.78
04.	Threat of war / violence	56.14	51.80
05.	Anger, hostility and aggressive behavior of Administration	59.64	34.93
06.	Bomb blast near my house	63.15	44.57
07.	Death of a close family member	36.84	46.98
08.	Threat of life	49.12	24.09
09.	Survived by chance	52.63	32.53
10.	Survived by freak circumstances	42.10	36.14
11.	Financial losses	45.60	36.14
12.	Tension caused by resistance and ignoring The warning to cooperate / to obey	42.10	36.14
13.	Migration to safer places and displacement	36.84	22.89
14.	Troublesome neighbors	29.82	28.91

15.	Major personal illness or injury	31.57	21.68
16.	Self or family members become unemployed	26.31	20.48
17.	Enforced change of residence	28.07	16.86
18.	Robbery or theft in the house	28.07	20.48
19.	Torture of a family member in the prison	31.51	14.45
20.	Seeing death of military *Jawans*	28.07	16.86
21.	Separation reactions of young children	24.56	12.04
22.	Detention in jail of a close family member	28.07	13.24
23.	Unexpected death of a close family member during encounter	17.54	10.84
24.	Disintegration / breaking of the family	17.54	13.25
25.	Dissociation from the family member	24.56	9.63
26.	Robbery of expensive valuables during Search operations	22.80	13.25
27.	Demands after abduction of a family member	10.52	14.45
28.	Abduction	19.29	10.84
29.	Detention in jail of oneself	5.26	0.00
30.	Sexual assault and rape	5.26	2.40

Significant differences were found between the percentages of Kashmiri people living in high and low risk conditions on certain traumatic stressors such as *threat of firing* (CR = 5.85, $p < .01$), *fear of crackdown and searching operations* (CR = 4.71, $p < .01$), *anger, hostility and aggressive behavior of administration* (CR = 2.76, $p < .01$), *threat to life* (CR = 2.45, $p < .05$), *unexpected death of close family member during encounter* (CR = 2.44, $p < .05$), *disintegration / breaking of the family* (CR = 3.14, $p < .01$), and *sexual assault and rape* (CR = 27.46, $p < .01$). Significant differences were not found between the Kashmiri people living in high and low risk conditions on the remaining items measuring traumatic stress.

There was no significance of difference between males and female subjects belonging to high- risk conditions on traumatic stressors. That is, males and females perceived the similar amount of traumatic stress. Significant difference existed between the comparison group only on *disintegration / breaking of the family* (CR = 4.06, $p < .01$).

Males living in low- risk conditions scored significantly higher percentages than the females living in low- risk conditions on the following traumatic stressors like *anger, hostility and aggressive behavior of administration, bomb blast near my house, threat of life, survived by chance, torture of a family member in the prison, detention in jail of a close family member, dissociation from family members and detention in jail of oneself.* On the remaining traumatic stressors, significant differences were not found to exist.

The findings of the present study suggest that the main reason of traumatic stress in the case of Kashmiri individuals may be that there is the threat of significant resource loss. That is, stress occurs when there is actual resource loss. A common set of traumatic stressors is perceived by the people within Kashmiri culture. For traumatic stressors in Kashmiri individuals, the occurrence of loss could have special meaning because traumatic losses are most clearly linked to survival.

Implication: The present study was conducted to explore traumatic stress among people of Kashmir living in high and low risk conditions. Traumatic stressors have been identified to know what type of traumatic stress the people of Kashmir perceived or experienced. The present research will be helpful to researchers to understand or to get an insight regarding the subfields of stress, i.e. traumatic stress. The research will provide basis for identifying the traumatic stress among people exposed to high risk and also help people to adopt healthy coping styles. Also, the research will provide a blue print of Kashmiri people's lifestyles.

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CHANGING SOCIETY'S ATTITUDE TOWARDS ENVIRONMENT BY CHANGING SOCIETY'S CULTURE

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ABSTRACT

Traditionally, a person's lifestyle was more locally determined and evolved slowly. Man has been seen to have an inherent nature to segregate within the species according to an individual's colour, ethnic group, language, profession, high income groups, low income groups etc and the list goes on to infinitesimally smaller and smaller groupings within each group. It can also be observed that each of these groups form a culture for themselves that is different from the rest. The power of peer pressure to influence individual behaviour is well documented in social psychology literature. People's behaviour, as it relates to environmental change, is influenced by the behaviour of their peers and social norms – what they perceive to be acceptable to others. Everything else – society, culture, social structure, power, groups, organizations – is ultimately dependent on the acts of individuals. If the culture of a certain group of people is to be conscious of society and the environment, then this is reflected positively in consumption patterns and waste management practices. On the flip side, if the culture is not to be environmentally aware and have a 'don't care' attitude, then again, this trend is bound to continue in the opposite trajectory, as seen in most of our surroundings. This paper will suggest how behaviour is influenced by knowledge, beliefs, attitudes, values, and desires, efforts to change behaviour in ways that would benefit the environment and how individual behaviour changes the society culture.

Keywords: Lifestyle; Culture; Environment; Knowledge; and Behaviour.

Although debate about the state of the natural environment persists, few would dispute that human behaviour has the potential to dramatically influence the health of the Earth. Thus developing an understanding of individual environmental

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attitudes and behaviors becomes an essential component of providing for a healthier planet. Various environmental problems pose a threat to environmental sustainability, among which global warming, urban air pollution, water shortages, environmental noise, and loss of biodiversity. Many of these problems are rooted in human behaviour (DuNann Winter & Koger, 2004; Gardner & Stern, 2002; Vlek & Steg, 2007), and can thus be managed by changing the relevant behaviour so as to reduce its environmental impacts.

Most of us are aware that "times have changed," especially when we compare our lives with those of our parents. We live in an era of unprecedented growth and change. Changes in human behaviour are believed to be needed because technical efficiency gains resulting from, for example, energy-efficient appliances, home insulation, and water-saving devices tend to be overtaken by consumption growth (Midden, Kaiser, & McCalley,2007). Moreover, physical and technical innovations imply behaviour changes as well because individuals need to accept and understand them, buy them, and use them in proper ways. We all consider ourselves to be unique individuals with our own set of personal opinions, preferences, habits, and quirks. Indeed, all of us are unique; and yet most of us also share many feelings, beliefs, and habits with most of the people who live in our society.

It should also be noted that most of the change that takes place could be temporary, although there have been changes that have become permanent. What is required is a change in behavioural pattern that is permanent and consistent among people. In order to achieve this, what must happen is that, residents living in their residential areas must develop a sense of social responsibility towards the society and the environment, which must then lead them to form associations and interest groups in their areas that try to encourage responsible and environmentally friendly behavioural patterns among residents. This would not only change consumption patterns but also bring about a holistic change within the neighbourhood and the environment. In as much as behaviour is influenced by knowledge, beliefs, attitudes, values, and desires, efforts to change behaviour in ways that would benefit the environment will have to take cognitive and affective variables into account. This would be possible if the people living in these areas are not only educated regarding the environment and what is good, but also are able to see the evidence of others taking active steps of contributing towards society and the environment. So start somewhere and make a difference.

CHANGES IN LAST 100 YEARS

The last 100 years have seen the transformation of the daily lives of millions of people living in industrialized nations, brought about by scientific discoveries. Every facet of our daily lives has been changed by technology-from how we work, travel, and obtain food, to recreating and maintaining social relationships. People living today in industrialized countries spend a large portion of their lives mediated by technology. We live, work, drive, shop, and do almost every other daily activity in a built environment. But this is a relatively new phenomenon, and many of the modern comforts that we take for granted (air travel, supermarkets, cars, computers, electric lights, telephones, televisions, etc.) were fantasies 100 years ago. Yet with this growth have come challenges. One in particular is the damaging effect of consumptive lifestyles on the natural environment. By the dawn of the 21st century, these effects were becoming readily apparent.

The cumulative result of technology and economic development has wreaked havoc on the natural environment. This is not to say that damage to the natural environment did not occur prior to the 21st century, because it did. Throughout history human activity has impacted surrounding environments (Ponting, 1991). But what has changed is the magnitude of the effects. The once localized damage that resulted from production and consumption has reached global proportions. By the end of the 20th century, it was clear that the lifestyles of those people living in industrialized countries were not sustainable (Hertsgaard, 1999). Pollution of air, water, and land that resulted from human activity threaten the very existence of our species. However, in the 21st century, globalization makes the globe flat, and lifestyle and taste are globally influenced and can change rapidly. Globalization is not only spreading ideas and culture, but it is industrializing and modernizing many previously agrarian countries.

CURRENT STATUS OF CONSUMPTION AND LIFESTYLES

Our planet's regenerative capacity is being greatly exceeded as the world's population is now producing and consuming more resources than ever. In fact, in developed and developing countries, people are acquiring much more than what they actually need and therefore producing an enormous amount of waste.

Our growing population puts so much pressure on the environment that nowadays the natural resources are no longer as abundant as they used to be. How we use and dispose of non-renewable resources is radically altering our ecosystems and even the planet's renewable resources (such as water, timber or fish) are rapidly being exhausted. We have now reached a tipping point where the quality of air and water needs to be improved, the level of production needs to be balanced and the amount of waste generated needs to be reduced.

Peoples' needs and, to some extent, aspirations are perhaps quite similar across the globe: to maintain our lives, to nourish ourselves and our children, to have access to dwelling and cloth, to be healthy and happy. However, the way we meet these needs and the resource intensity involved dramatically differ among countries. The massive consumption of both renewable and non-renewable resources contributes to a massive loss of biodiversity – with current extinction rates of birds, mammals and amphibians estimated to be at least 100 times, but possibly over 1,000 times, higher than pre-industrial rates. The poorest population is most affected by such changes giving that they rely directly on natural resources — such as fishing, small-scale agriculture or forestry — for their livelihoods.

At the global level, between 1960 and 2000, food consumption and production increased 2,5 times, water use has doubled, and wood consumption has tripled. These Western lifestyles of consumerism are spreading all around the world through products and services, media and trade policies. Goods and services previously seen as luxuries - TVs, mobile phones and cars – have now become necessities. It can be seen in the rising number of cars on the roads, the growing frequency and distance of leisure and business trips, the escalating ownership of household appliances and the increasing size of housing per capita. Electricity consumption from space and water heating, paper consumption and the amount of waste of all categories are on the rise.

There are two main problems first consumption and second increase in population. As the technologies are increasing it is changing lifestyles of people in other words changes the behaviour of people's. Nowadays peoples move according to those they watch. They want everything somebody else is having whether they need those or not *i.e.* individual behaviour changing society's behaviour. Environmental problems are particularly insidious because they develop slowly. Research on human perception suggests that sensory changes (visual, auditory, tactile, gustatory) that occur slowly are difficult to detect. As long as the change occurs slowly, we adapt to the surroundings, and are unlikely to detect a change. From one day to the next, we notice little (if any) change in the natural world around us, or even changes in our lifestyles. Yet if we were to jump 10 years into the future, we would likely notice a substantial change.

CULTURAL EFFECTS ON BEHAVIOR

As a species, we are social beings who live out our lives in the company of other humans. We organize ourselves into various kinds of social groupings, such as nomadic bands, villages, cities, and countries, in which we work, trade, play, reproduce, and interact in many other ways. Unlike other species, we combine socialization with deliberate changes in social behavior and organization over time. Consequently, the patterns of human society differ from place to place and era to era and across cultures, making the social world a very complex and dynamic environment.

Each person is born into a social and cultural setting—family, community, social class, language, religion—and eventually develops many social connections. How the enviroment [everything around us] shapes our behaviour as a society? Can we change the culture in order to change the world?

> 'Individual behaviours are deeply embedded in social and institutional contexts. We are guided as much by what others around us say and do, and by the "rules of the game" as we are by personal choice.

There are many different social psychological models that seek to explain human behaviours. Broadly speaking, the factors in most of them can be split into three levels:

1. Personal ('micro') factors which are intrinsic to the individual, such as their level of knowledge or their belief in their ability to change their behaviour and their habits.
2. Social ('meso') factors which are concerned with how individuals relate to each other and the influence of other people on their behaviour.
3. Environmental factors over which individuals have little control. These include both:
    a. local ('exo') environmental factors, for example the area in which an individual lives and local shops and facilities, and
    b. wider ('macro') environmental factors such as the economy or technology

Culture is Commonly Shared

Different kinds of groups can have cultures. People come to share behaviors and ideas because they communicate with and observe each other. Although groups from families to societies share cultural traits, anthropologists have traditionally been concerned with the cultural characteristics of societies. Many anthropologists define society as a group of people who occupy a particular territory and speak a common language not generally understood by neighboring peoples. If only one person thinks or does a certain thing, that thought or action represents a personal habit, not a pattern of culture. For a thought or action to be considered cultural, some social group must commonly share it. We usually share many behaviors and ideas with our families and friends. We commonly share cultural characteristics with those whose ethnic or regional origins, religious affiliations, and occupations are the same as or similar to our own. We share certain practices and ideas with most people in our society. We also share some cultural traits with people beyond our society who have similar interests.

Culture and Attitudes

The interpretation that cultural differences in environmental attitudes result from differences in the importance of social relationships is consistent with social psychological research on the diffusion of responsibility and social loafing. One aspect of environmental problems is that they occur on a grand scale. Air pollution causes acid rain over thousands of square miles; greenhouse gasses cause warming of the entire planet; and water pollution is dispersed over miles of ocean. Research conducted in the United States suggests that on broad, dispersed types of issues, there is a tendency for people to *loaf*—to exert less effort when working collectively toward a common goal (Karau & Williams, 1993).

Solving environmental problems will require a concerted effort by a large group of people. But why should I work hard, when I am just a small part of the group. Indeed, as the group size increases, people are more likely to loaf. This is what we tend to see in the United States—unless the problem directly affects me (the individual), or unless I see a direct result of my action (e.g., saving money, or a benefit to my local community), I am less likely to be concerned about the issue, and less likely to act in ways that address the problem (e.g., recycling, conserve energy, use public transportation).

But we see a different pattern in collectivistic cultures. A considerable amount of research conducted in Asia and other collectivistic cultures suggests a lesser tendency to loaf than that found for people in individualistic cultures. The importance of social relations (the core element of a collectivistic culture) leads people to work harder toward goals that benefit the group, rather than the individual. This suggests that in collectivistic cultures, people should be more likely to engage in actions that address large-scale social issues like environmental problems, even when the problem does not directly affect them or when the action does not directly benefit the individual.

As an extension of this argument, it was found that women are more concerned about environmental issues than men, more biospheric in their attitudes, and more likely to act in pro-environmental ways. On the aggregate, women tend to be more relationship-oriented than men, and we might expect results similar to those reported above for culture. The cumulative research evidence suggests that this is in fact the case. In studies conducted in the United States, the effect appears to be small but consistent. In a review of 32 published studies, Zelezny et al. (2000) reported that women tend to express more concern for environmental issues and to report engaging in pro-environmental behavior and activism than men. Zelezny et al. (2000) reported similar findings among children (ages 6-10) and across cultures (based on data from Central and South America).

What Psychologists can do?

In the social and behavioral sciences, environmental degradation, human wellbeing, and environmental behavior have been research topics for several decades (e.g., Bechtel & Churchman, 2002; Geller, Winett, & Everett, 1982; Kaminski, 1976; Redclift & Woodgate, 1997; Stokols & Altman, 1987; Wohlwill, 1970), giving rise to journals like *Ecological Economics*, *Environment and Behavior*, *Human Ecology Review*, and *Journal of Environmental Psychology*. Recently, environmental psychology has been broadened to incorporate sustainability problems (e.g., Bonnes & Bonaiuto, 2002; Gardner & Stern, 2002; Kaufmann-Hayoz, 2006; Schmuck & Schulz, 2002; Steg & Vlek, in press; Vlek, 2000; Winter & Koger, 2004).

The science of psychology can play an important role in understanding and solving these problems. Environmental problems are caused by human behavior, and solving these problems will require changes in behavior. Psychology, as the science of behavior, can make a substantial contribution to this change. Psychologists can work to develop theories of human cognition and behavior that lead to environmental problems develop and assess program that move us toward sustainability, or study the impact of culture on environmental attitudes, beliefs, or behavior.

When we think about attitudes toward environmental issues, we often assume that these attitudes fall along a continuum from low (not concerned) to high (very concerned). These attitudes might reflect general concern for environmental issues, or attitudes about specific issues like recycling, energy conservation, or public transportation. However, research suggests that there are different types of attitudes, and that two people can be equally concerned about environmental problems, but for very different reasons. For psychologists, the more interesting question is not whether or not a person is concerned about environmental problems (most people are), but *why* they are concerned.

At the very core of environmental problems is an individual's understanding of his or her relationship with the natural environment. All cultures that exist today, and throughout history, have addressed the issue of the relationship between individuals and the natural environment (Ponting, 1991). Just as every culture has prescribed a set of rules for social interaction, culture also frames the relationship between the individual and nature. As environmental problems have become more apparent, our understanding of the problems, and the solutions we develop to address the problems, occur through the filter of culture.

CONCLUSION

> "Individuals are capable of changing culture in a society. If individuals are targeted, one household or a handful of households at a time, and if their behaviour is changed, then this changed behaviour will percolate into the rest of society".

Typically, lack of environmental knowledge is one of the most cited barriers to personal engagement with protecting the environment. Individuals can contribute significantly to achieving long-term environmental sustainability by adopting pro-environmental behaviour patterns. The challenge for environmental psychologists is to understand the cognitive, motivational and structural factors and processes that threaten environmental sustainability, so that pro-environmental behaviours could be facilitated and emerge worldwide.

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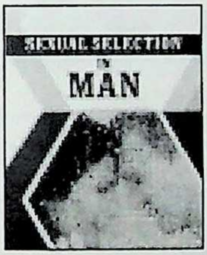

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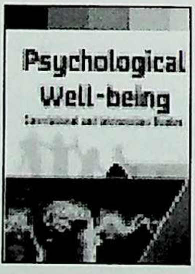

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